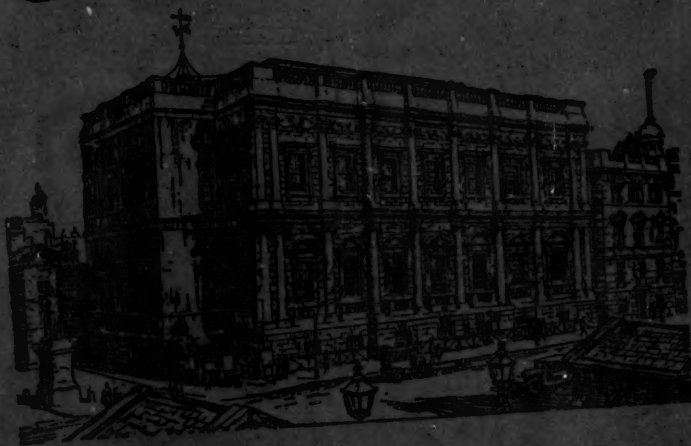


NOVEMBER 1955



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The speed of the trooping aircraft, as against travel by sea, is self-evident. Sea transport moreover has the disadvantage that in carrying a much larger number of men per unit it is keeping them inactive in the "pipeline" for a comparatively long period. In effect this delay means that an increased number of men must be kept ready under arms; whereas by air, troops need not be out of action in transit for more than about twenty-four hours. By the proper use of the air, therefore, fewer men are needed to guard the widely dispersed outpost defences of the democracies. The manpower saving on the Far East route alone is estimated by the War Office to be one-seventh, so that out of every 10,000 moved in a year, there are 1,400 or 1,500 more men effective in the field.

Another feature of air trooping which has directly influenced the three Service Departments in their decision to expand its volume, is the net saving of air travel over most sea routes. From the United Kingdom to Egypt, for instance, in 1952/3 the average fare per head by sea was officially stated to have been £30, compared with £22 using charter aircraft. This is considerably less than even tourist fares on the scheduled airlines, since on troop charter work every available seat can be filled.

In 1950, the Government decided that the British independent operators should provide the bulk of the extra capacity needed to develop the air trooping scheme. In this way, a measure of stability would be given to these operators enabling them to invest in modern equipment and so provide an important strategic reserve of aircraft to supplement Transport Command when required.

The aircraft at present operated are mainly suited to the medium haul routes such as those to the Mediterranean, and there has been a shortage of large, long-distance airliners. The three Bristol Britannias recently ordered by the Government for trooping operations will be capable of doing the work of six of the smaller capacity machines now used.

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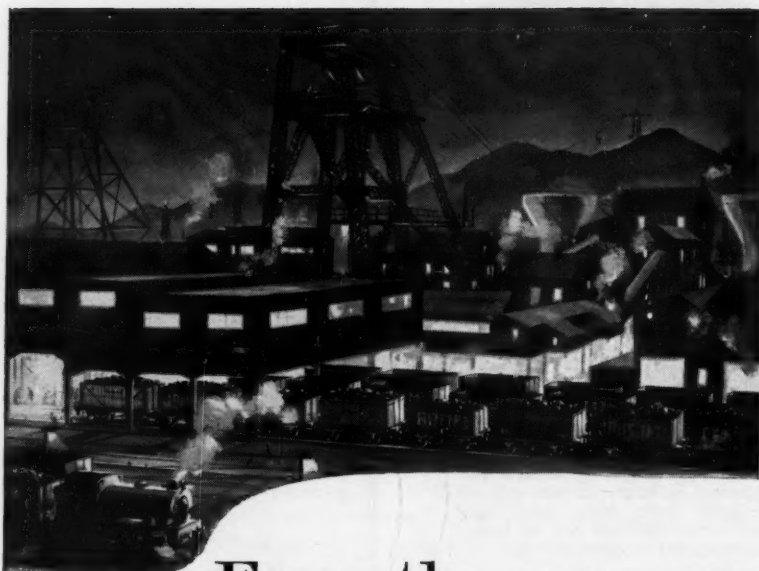
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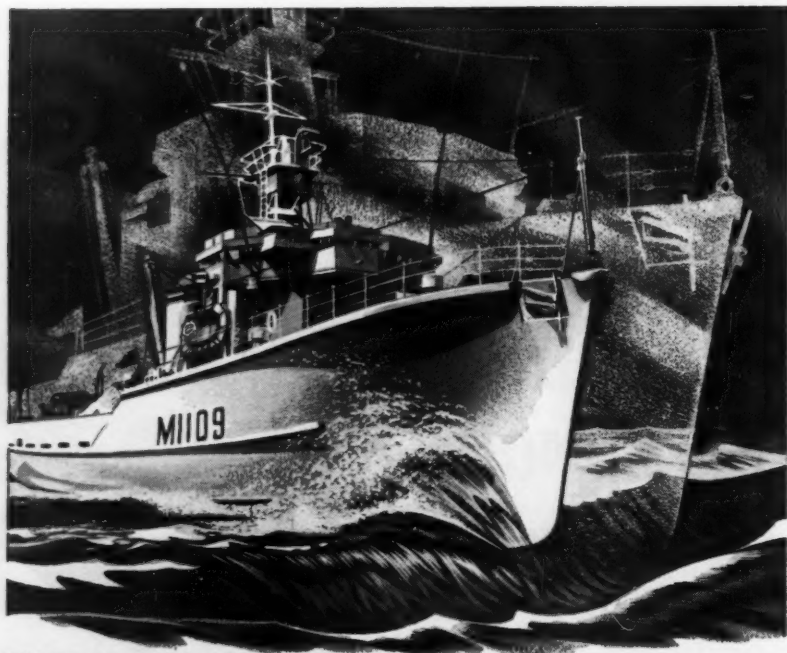
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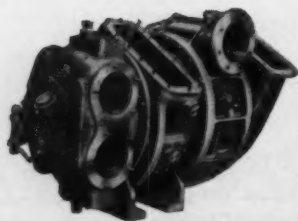




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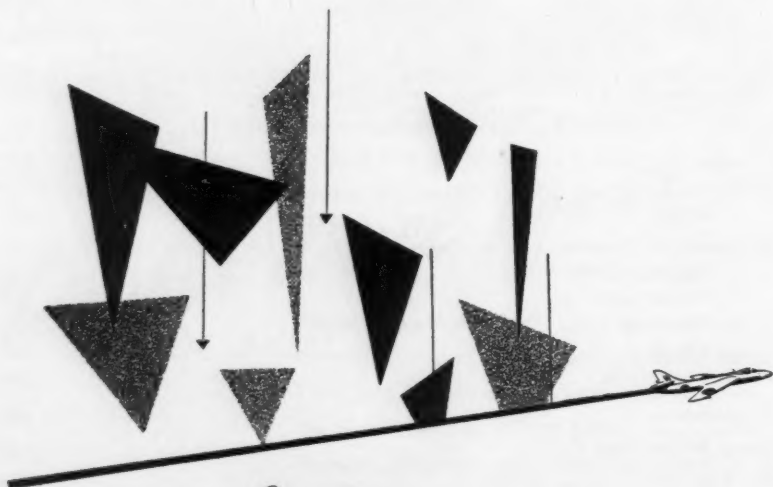
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of the

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The Institution is situated opposite the Horse Guards in Whitehall. It provides members with a comfortable reading room containing the leading papers, periodicals, and principal Service (including foreign) Journals.

There is a lecture theatre where lectures are given followed by discussions in which officers of every rank are encouraged to take part.

Members can obtain on loan four volumes at a time from the best professional library in the Country. They are provided with a free copy of the JOURNAL.

There is a private entrance to the celebrated R.U.S. Museum in the former Banqueting House of old Whitehall Palace.

## MEMBERSHIP

Commissioned officers on the active and retired lists of all H.M. Services, including those of the Dominions and Colonies, also midshipmen of the Royal and Dominion Navies, the R.N.R., R.N.V.R., and R.N.V.S.R. are eligible for membership without formality.

Retired officers of the Regular and Auxiliary forces, including the Home Guard, whose names no longer appear in the official lists, are eligible for membership by ballot.

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The JOURNAL is published in February, May, August, and November. Copies may be purchased by non-members, price 10s. od.: annual subscription, £2 post paid. Orders should be sent to the Secretary, Royal United Service Institution, Whitehall, S.W.1.

## MUSEUM

The R.U.S. Museum is open daily from 10 a.m. to 5 p.m., except on Sundays, Christmas Day, and Good Friday. Members may obtain free passes for their friends on application to the Secretary.

Members of the Services in uniform are admitted free

## SECRETARY'S NOTES

November, 1955.

### COUNCIL

#### Ex Officio Member

General Sir Gerald W. R. Templer, G.C.B., G.C.M.G., K.B.E., D.S.O., has accepted the invitation of the Council to become an ex officio Member of the Council on taking up the appointment of Chief of the Imperial General Staff.

### NEW MEMBERS

The following officers joined the Institution between 27th July and 6th October, 1955 :—

#### NAVY

Sub-Lieutenant P. J. Hinton, R.N.  
Commodore J. V. Brock, D.S.O., D.S.C., C.D., R.C.N.  
Lieutenant-Commander H. M. Simeon, R.N.  
Captain L. E. Beaton, R.M.  
Captain P. F. P. Berryman, R.N.  
Sub-Lieutenant R. D. L. Symes, R.N.V.R.

#### ARMY

Major L. E. Jarvis, The Toronto Scottish Regiment.  
W. G. McStay, Esq., late Lieutenant, The Argyll and Sutherland Highlanders.  
Major C. E. Taylor, Royal Artillery.  
Lieutenant R. M. Kennedy, Royal Engineers.  
2nd Lieutenant R. J. Sibley, The Essex Regiment.  
Major T. J. Wallis, The Rifle Brigade.  
Colonel R. C. Thomson, C.B.E.  
Major D. W. Voller, R.A.S.C.  
Captain J. G. Kilpatrick, R.C.A.  
Major D. K. Robertson, The Queen's Own Rifles of Canada.  
Lieut.-Colonel H. Lacy, M.B.E., Royal Artillery.  
Lieutenant P. N. Erskine, Scots Guards.  
Lieutenant P. V. Verney, Irish Guards.  
Bt. Lieut.-Colonel P. M. Hunt, D.S.O., O.B.E., The Queen's Own Cameron Highlanders.  
Major-General W. J. V. Windeyer, D.S.O., O.B.E., E.D., late Australian Army.  
Lieutenant J. D. A. Linn, M.C., Royal Artillery.  
Major J. J. W. Forster, The Royal Berkshire Regiment.  
Captain P. C. M. Mocatta, The Royal Lincolnshire Regiment.  
Captain A. M. H. Scott, The Royal Northumberland Fusiliers.  
Major D. E. B. Morrison, R.A.S.C.  
Major W. E. Grant, Royal Canadian Corps of Signals.  
Lieut.-Colonel G. S. Cole, C.B.E., Royal Artillery.  
Captain J. Dyer, R.A.O.C.  
Major-General O. P. Edgcumbe, C.B., C.B.E., M.C.  
Captain D. A. Morgan, R.A.O.C.  
R. G. B. Kinnoch, Esq., late Captain, R.A.O.C.  
Lieut.-Colonel C. B. Appleby, D.S.O., 1st Punjab Regiment.  
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Major V. H. Seal, Royal Artillery.  
Major F. J. Hume, R.A.P.C.  
Captain H. C. Ealand, The Dorset Regiment.

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 Squadron Leader J. M. Bangay, R.A.F. Regiment.  
 Squadron Leader W. J. Marriott, R.A.F.  
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 Squadron Leader G. N. W. Macfarlane, R.A.F.  
 Flight Lieutenant R. F. Sheppard, R.A.F.  
 Flight Lieutenant J. R. Caldow, R.A.F.  
 Group Captain J. H. Maguire, D.S.O., O.B.E., R.A.F.

## PRIZE MEMBERSHIP

Acting Lieutenant R. P. Dixon, R.M., and Pilot Officer A.M. Wraight, R.A.F., have been awarded five years' free membership of the Institution.

## COVENANTED SUBSCRIPTIONS

The Council hope that many more members will support the scheme for covenanted subscriptions, details of which have been circulated.

This materially assists the Institution as it enables income tax at the full current rate to be reclaimed on each subscription and goes a long way towards meeting the increased essential costs of administration. The Council wish to thank the many members who have re-covenanted since the beginning of the year.

To date, there are 1,302 annual and 258 life covenanted members.

Any member who has not received his copy of the scheme or who requires new forms is requested to communicate with the Secretary.

## LIAISON OFFICERS

The following alterations to the list of Liaison Officers, as published in February, have taken place :—

*Establishment or Command**Name*

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Portsmouth ... .. Lieut.-Commander R. E. S. Wykes-Sneyd,  
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 Second Tactical Air Force ... Group Captain G. A. V. Clayton, D.F.C.

## MUSEUM

## ADDITIONS

Two gorgets and a shoulder-belt plate of the Yorkshire Buffs Militia, 1758, and a rapier, early XVIIIth Century (3728-3731.) Deposited by the Victoria and Albert Museum.

The George Cross awarded to Flying Officer Walter Anderson (3732.) Deposited by Squadron Leader G. Marsland.

A group of four medals awarded to J. W. Wickenden, A.B., R.N., 1854 (9679.) Given by Miss A. E. Wickenden.

A ship's badge of H.M.S. *Thunderer*, 1955 (9680.) Given by H.M.S. *Thunderer*.

Three specimen medals comprising :—Cadet Forces, British Korea, and the African General Service with clasp for Kenya, 1952 (9681.) Given by the War Office.

A full-dress uniform of an officer of the 13th Royal Canadian Militia, 1866 (9686.) Given by Mrs. L. B. Zeal.

A group of five medals awarded to E. Carr, A.B., R.N., 1914 (9687) Given by Mrs. E. I. Carr.

### JOURNAL

Offers of suitable contributions to the JOURNAL are invited. Confidential matter cannot be used, but there is ample scope for professional articles which contain useful lessons of the recent war; also contributions of a general Service character, such as strategic principles, command and leadership, morale, staff work, and naval, military, and air force history, customs, and traditions.

The Editor is authorized to receive articles from serving officers, and, if found suitable, to seek permission for their publication from the appropriate Service Department.

Army officers are reminded that such articles must be accompanied by the written approval of the author's commanding officer.

### LECTURES

The programme of lectures for the second half of the 1955-56 session is published with this number of the JOURNAL.

### LIBRARY

Brigadier E. A. James, O.B.E., T.D., (late Royal Signals, T.A.), has presented to the Library a set of charts dealing with the history of the British Army on the Western Front in 1914-18, which he has produced. Bound in book form, the charts are coloured by hand and show the employment and location of all British corps and divisions in France and Belgium on certain selected days in each year from August, 1914, to December, 1918. The days selected are spread over each year. This presentation, which is the result of years of research, will undoubtedly be of great value and interest to members and research workers studying the 1914-18 War.

### REPRINT OF LECTURE

To meet the demand for copies of the lecture *Organization for War in Modern Times* given by Field-Marshal The Viscount Montgomery of Alamein in October, 1955, a reprint has been made. These are available at 2s. 6d. a copy, post paid.

### CHANGE OF ADDRESS

Members are particularly requested to notify any change of address which will affect the dispatch of the JOURNAL.

Naval officers are strongly advised to keep the Institution informed of their address, as JOURNALS sent to them via C.W. Branch of the Admiralty are invariably greatly delayed.

As a serving officer is liable to frequent changes of station, it is better for such members to register either a permanent home or a bank address.

### CHRISTMAS CARDS

Orders for Christmas cards, specially designed for members of the Institution, can still be placed.

Card A has the crest of the Institution on the outside and inside a reproduction of a black and white sketch of the exterior of the Banqueting House. The price, including envelopes, is 10s. a dozen.

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Postage in each case is 6d. for each dozen by ordinary mail.

Members are requested to ensure that the correct remittance, including postage, is sent with their orders. It is regretted that *orders cannot be executed until payment is made.*

Sample cards can only be sent against a remittance of 1s. for the A type and 1s. 6d. for the B.





*By courtesy of Kemsley Newspapers*

**Field-Marshal Viscount Montgomery (right) and General Sir Richard Gale at the Royal United Service Institution before the former's lecture on 12th October, 1955. Behind are Admiral of the Fleet Sir Arthur Power (right), Chairman of the Journal Committee, and the Secretary of the Institution.**

# THE JOURNAL

of the

## Royal United Service Institution

Vol. C.

NOVEMBER, 1955.

No. 600.

### ORGANIZATION FOR WAR IN MODERN TIMES

By FIELD-MARSHAL THE VISCOUNT MONTGOMERY OF ALAMEIN, K.G., G.C.B., D.S.O.

On Wednesday, 12th October, 1955, at 3 p.m.

GENERAL SIR RICHARD N. GALE, G.C.B., K.B.E., D.S.O., M.C., A.D.C., in the Chair

THE CHAIRMAN: Gentlemen, I think I should start this afternoon by introducing you to the Field-Marshal. Perhaps some of you do not know what he looks like? Well, this afternoon you will have a chance of seeing. And perhaps some of you are in doubt as to what he thinks? I think perhaps at the end of the afternoon you will no longer have any doubt about that.

It is a very great privilege to me, as Chairman of the Council of the Royal United Service Institution, to welcome you here this afternoon and to take the Chair during his, what I know will be, immensely interesting lecture. With those few words I will ask the Field-Marshal to deliver his lecture to us.

### LECTURE

ON 21st October last year, 1954, I gave an address here entitled, "A Look through a Window at World War III." That address created quite a stir in military circles in this Country and even more so in the U.S.A. It therefore fulfilled its object, which was to try to direct thought to the future. In this lecture I propose to discuss the subject of organization for war in modern times. I have chosen this title because it is my view that our defence organization today is *not* suited for modern times. Having made this seemingly destructive criticism, let us see if we can construct something sensible from the ashes; and ashes there will continue to be if we are not careful.

### THE STRATEGY OF MODERN WAR

The earth consists of large masses of land and great areas of water. Man is primarily a land animal and control of the land masses has always been for him a priority objective in war. Many centuries ago he found that a skilful use of the water areas of the world opened up the land masses to him, and enabled him to pursue his objectives the more easily.

Man then learned to fly, and he soon found that unless he could dominate the skies above the land and the water, he could not carry out satisfactorily the land and sea tasks necessary for his purposes. Against this background we reach the conclusion that in global war today and in the foreseeable future, air power is the dominant factor. Therefore the first object in our strategy in the Western Alliance must be to win command of the air.

Secondly, it will be essential, in an East-West war, that we should control the seas. That is, we must be able to use the seas ourselves and deny their use to the enemy.

Next, while the air battle is raging and the struggle for control of the seas is in progress, it will be vital to prevent enemy land forces from occupying the territories of the Western peoples, disrupting our way of life, and using our industrial and production organization for their own purposes. If these things were to happen we would lose: no matter what successes we gained in the air and at sea.

The armed forces necessary for this strategy must be organized in such a way that they are geared to a nuclear capability, with all that this entails in the use of firepower and in the saving of time and manpower.

These forces must be suitably organized for the conditions of peacetime activities, which may at any time include small or limited wars in which nuclear weapons are unlikely to be used, *and also* for the conditions of world war in which nuclear weapons would certainly be used by both sides.

The problem will then be to get a right balance between air, sea, and land forces, and one that will suit the needs of the national problem and also enable the Nation to play its full part in the Alliance. In addition, a sound Civil Defence organization is vital in each national territory and this must be under military direction and control.

All these requirements must be provided within the financial limits laid down by Governments. The economics of defence are becoming a vital problem today.

Let us see if we can point the way towards solving some of the problems that will arise in producing the right organization and the right forces, all within the realm of financial possibilities.

#### THE CONDUCT OF WAR

We are in the midst of a revolution in military affairs, brought about by scientific advances in the development of nuclear weapons and the means of delivering them. As a result, the capability to destroy is reaching unprecedented proportions. Certain changes in warfare will follow, because of this revolution in weapons. I will name two which are very important and will have an impact on future defence organization.

First will come a change in the tempo of war. Stockpiles of high yield weapons will create such destruction early in a war that the phase of decisive operations will begin almost at once. It is clear, therefore, that the forces which are essential for the conduct of operations during the first phase must be 'in being' in peace, and be immediately available on mobilization. There will be no time in which to train these forces after the outbreak of war.

The second point is that, because of the increased tempo of war, we must be able to execute our plans with speed and efficiency at once. The side that can execute its plans the most effectively, *from the very beginning*, will gain the advantage. We must also be able to sustain our operations in the face of continuing destruction of a magnitude previously unknown.

We must now examine the conduct of war in more detail and see if we can reach conclusions about the shape of things to come.

#### GLOBAL DIRECTION AND COMMAND IN WAR

My first point deals with the direction of the war, and the command of the fighting machine. I must remind you that there would be only one war and that it would be

global. The strategy for this global war demands early command of the air. This brings us at once to the subject of air power.

### AIR POWER

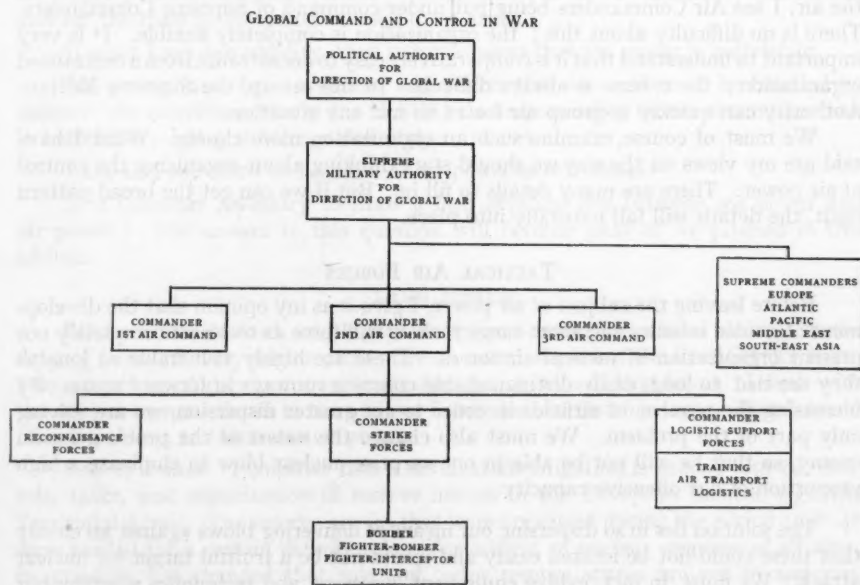
We can master the air only if we destroy the enemy air forces. We shall never be able to do this unless we organize and control the air forces of the Western Alliance as one single mighty weapon of air power.

The first task in global war is to win command of the air. Victory in this operation will go to the side that is superior in executing sustained operations in the face of unprecedented destruction. The blows that are launched against the enemy in the global air war must be timed and directed as part of a single great campaign. The Western Alliance must have the means of centrally controlling all moves in the global struggle for command of the air.

Here is the way I consider the Western Alliance should organize in wartime, and this chart gives the organization I propose.

We should establish a single political authority for the direction of war. I would put this authority in North America.

I have put the military direction of the global war in the hands of a Supreme Military Authority. This authority would control world-wide air operations, either through some agency within their own organization or, better, through a commander appointed for the purpose, who should be an American, since the U.S.A. has the only large strategic air force in the Western Alliance.



The chart shows the lines on which I suggest the control of the air forces of the western world could be based. I will not discuss the control of surface forces as I think our experience has produced a system which is suitable for war, provided we

get the right structure at the top. But the control of air forces is another matter. The war in the air is essentially one battle against a single enemy. If it is planned and conducted as a series of separate battles, we lose flexibility and the ability to concentrate.

On the right of the chart you see the Supreme Commanders. Today we have two. I consider there should be five, as shown on the chart. Each Supreme Commander may, or may not, have subordinate air commanders; this will depend on the situation.

For the initial air battle I consider it will be better to retain all the air forces under the direct control of the Supreme Military Authority.

The Supreme Military Authority allocates the Western air forces and resources to subordinate air commanders in relation to their tasks. It will, of course, consider the countries of origin of these air forces, and their logistics, when making the allocation.

Each commander has three forces with which to fight, *Reconnaissance* forces, *Strike* forces, and *Logistic Support* forces. By 'Support,' I mean training, air transport, logistics. It has nothing to do with the support of land or naval forces; that is one of the tasks of Strike forces, which are composed of bomber, fighter-bomber, and fighter-interceptor units. Another task of Strike forces is air defence.

With an air command system of the type I have shown on the chart, the whole weight of the air power of the western world could be applied quickly to the right targets.

When the Western Alliance had established a satisfactory degree of control in the air, I see Air Commanders being put under command of Supreme Commanders. There is no difficulty about this; the organization is completely flexible. It is very important to understand that it is comparatively easy to decentralize from a centralized organization; the reverse is always difficult. In this set-up, the Supreme Military Authority can quickly re-group air forces to suit any situation.

We must, of course, examine such an organization more closely. What I have said are my views on the way we should start thinking about organizing the control of air power. There are many details to fill in. But if we can get the broad pattern right, the details will fall naturally into place.

#### TACTICAL AIR FORCES

Before leaving the subject of air power, I give it as my opinion that the development of guided missiles and short-range rockets will force us to recast completely our present organization of tactical air forces. These are highly vulnerable so long as they are tied to long, easily distinguishable concrete runways in forward areas. By increasing the number of airfields in order to get greater dispersion, we are solving only part of the problem. We must also change the *nature* of the problem for an enemy, so that he will not be able in one surprise nuclear blow to eliminate a high proportion of our offensive capacity.

The solution lies in so dispersing our means of delivering blows against an enemy that these could not be located easily and would not be a fruitful target for nuclear attack. We must, in fact, evolve equipment, weapons, and techniques whereby our aircraft, our vehicles of delivery, can be launched without the use of large airfields. We must develop zero-length launches and rocket-assisted take-off, using PSP airstrips in fields through the countryside; possibly a flight of six aircraft could operate from each airstrip.



There will be problems of the operational control of such a widely dispersed tactical air force; there will be problems of maintenance and of recovery.

I consider that we must plan to disengage the tactical air forces from the role of air defence. That part of our tactical air forces which has the role of co-operation with the land forces must be free to do so; for this task they must carry nuclear weapons, and their primary task will be to disrupt enemy land movement, beginning when it is at a distance from our own forces.

#### SEA POWER

Let us discuss sea power.

If the strength of our offensive air power fails to deter an aggressor, and war is forced upon us, then it will be vital to have control of the seas. This will be necessary not only for the transport of men and materials, but also to give increased flexibility to our operations generally.

I am on record as having said that, in an East-West war, the West could not win if it lost control of the Atlantic. One of the means to bring Western Europe to its knees, without the necessity of complete thermo-nuclear destruction, would be to cut off all supplies. One way to avoid this happening would be to develop an air transport organization to supplement the life-line by sea; but this we have not got.

Today, navies are responsible for control of the seas and for maintaining sea communications. Adequate naval forces must be available to meet this threat. In the conditions of today those naval forces must have their own air forces, since it is no longer possible to allocate either to ships alone, or to aircraft alone, tasks which call for the close co-operation of both these arms.

If what I say has validity, then it would seem that sea power is indivisible.

Sea power must fight over, on, and under, the sea—and must be handled by sailors. We therefore arrive at the fact that the responsibility for sea communications is indivisible; today it belongs definitely to navies.

I am also on record as saying that air power is indivisible.

Is it therefore necessary to draw a firm dividing line between sea power and air power? The answer to this question will become clear as we proceed in this address.

#### LAND POWER

Efficient, well trained, and highly disciplined armies are a vital element in the defence forces of every nation; they are an essential part of the inter-Service team. I do not propose today to discuss the problems and tasks of land forces. I dealt with the subject in some detail in the address I gave here in October, 1954. But I would like, in passing, to touch on two points.

*Reserve armies.* I consider that a detailed investigation is needed into the size, role, tasks, and organization of reserve armies in the European theatre, e.g., the Territorial Army. The reserve armies that were organized during the period 1946-48 were needed for a certain definite role. The advent of nuclear weapons of all sizes, in quantity, has changed that role and today reserve armies are not in any way organized or geared for the changed conditions.

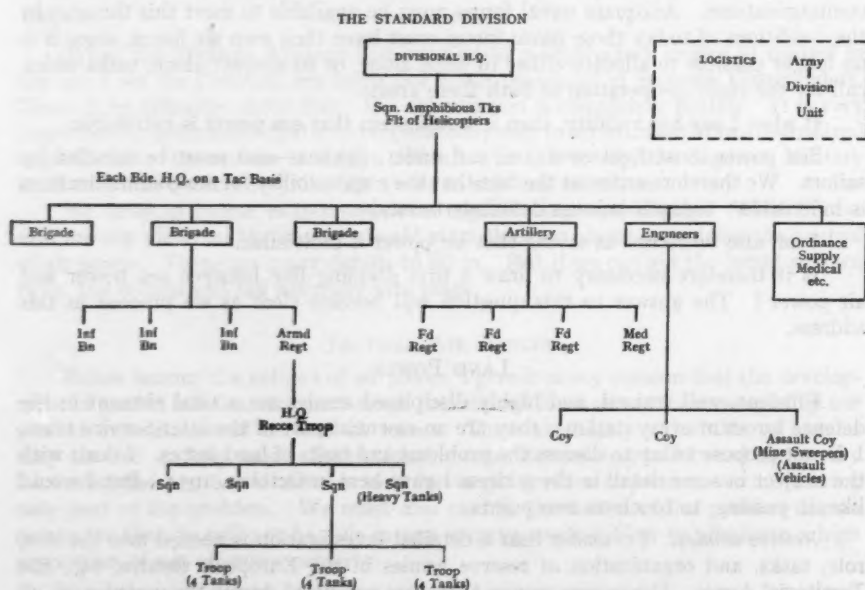
Having defined the role of a reserve army, an organization is required which will ensure it can carry out that role in terms of efficiency and time. Today, none of them could do so.

*Organization of divisions.* I consider that the day of the armoured division and of the infantry division *as we knew them in the late war* is past. The armoured division is expensive in overheads, it lacks staying power, and it is not capable of sustained battle action. The infantry division cannot fight effectively in most countries without armoured assistance, and tanks must now be an integral part of the division.

When fighting begins on land the best results are obtained initially by teams or groups composed of infantry, tank, and artillery. I consider it is therefore best to organize and train that way in peace. I would form 'Standard divisions,' abolishing the infantry and armoured divisions *as we know them today*. The chart below gives you my conception of a 'Standard division' for the European theatre.

This division could fight effectively on a wide front in the mobile battle, organized in three fighting groups or teams. Alternatively, it is suitably organized to fight with cohesion in the static battle. In either case it has staying power, and that is essential.

There will come a moment in the tactical battle when the opportunity is favourable for launching a flood of tanks against the enemy. For this reason a Corps should have two independent armoured brigades, each of three armoured regiments and such other arms as are considered necessary. There might be a small headquarters to command this mass of armour in the Corps.



#### LAND FORCES GENERALLY

The governing factor in land armies is that they must be reduced in size as atomic weapons become available. It is specially important to reduce the administrative 'tail.' We must also reduce the number and size of headquarters and not have a Divisional headquarters when a Brigade headquarters would do the job. And finally,

the Divisional artillery must have range, and the infantry battalion must have mortars and also its own means of anti-tank defence over and above any tanks that may be allotted to work with the battalion.

#### LOGISTICS

Let us now examine logistics: or administration as we call it in the British forces.

We shall be fighting the air war at 700 knots or more. But we still have a logistic system that moves at 15 knots.

I consider that there is a requirement for air transport on a gigantic scale. We should start now to build a world-wide air transportation capability to meet our deficiency. If we are to sustain air operations in the great air battle, the weapons and the men and the supplies needed by the air forces must move at hundreds of knots, not 15. Air transport is the only way to do this. This opens a wide range of thought. For the Western air forces, air supply is essential. But would it not help to solve other problems?

An expert once said: "Air transport is the *best* means to get supplies to most places, it is the *only* way to get supplies to some places, and it is the *fastest* way to get supplies to any place." I agree with him.

Stockpiling will, of course, be necessary in peacetime. But the munitions of war on a large scale will be needed at many places not foreseen during planning.

Administration in modern war is no longer a business of assembling large depots of supplies and transport well behind the shield of fighting forces in the forward areas. Long-range air power in the enemy hands will make it impossible to erect sanctuaries for the vast supplies the forces need. We must cut down the tremendous administrative tail the Allies had to drag across Europe in World War II. We must develop methods of sustaining our forces so that the whole system does not collapse if one part of the system is destroyed.

I do not suggest for a moment that we can move everything by air, or that air transport could replace our sea life-line in any foreseeable future. Until we have great nuclear-powered air freighters, or something of that sort, we shall always need our ships and navies to protect them. Indeed, as things stand today, if the navies lose control of the seas the Western Alliance would have to go out of business.

But we need air transport on a far larger scale than we have today, to move men and essential munitions of war quickly. These must be moved at the same speed as the battle, particularly the air battle.

#### THE ECONOMICS OF DEFENCE

The nations of the Western Alliance are straining under defence budgets which are heavy and painful. Ahead lies a vista of ever-increasing Government expenditure and wage claims. In this Country, the battle against inflation is on. All nations are looking for ways and means of reducing defence budgets and, in the case of the bigger nations, the problem is rendered the more difficult in that they have to be prepared to fight two kinds of war, conventional and nuclear. In general, limited or small wars call for conventional weapons. But once war becomes unlimited and global, nuclear weapons would be used from the outset by both sides.

In war, offence and defence alternate. The attempt to create an adequate organization *for both* is becoming increasingly expensive. Where is the money to come from to provide all that is needed in this nuclear age?

I consider that we shall build up an adequate defence within the definite limits of economic possibilities only by making a completely new approach to the problem, and by working on the principle of economy of force.

#### THE PROBLEM OF THE THREE FIGHTING SERVICES

Let us begin by examining the inter-Service problem. That is not so easy to solve; any solution will require firm Ministerial action.

If every nation had only one Service, it would be comparatively simple to determine how that Service should be organized and equipped. But there are three Services, and there will be three Services for many years to come.

I have already said that the dominant factor in warfare today and of the future is air power: offensive air power on a mighty scale, which will make it absolutely clear that war is the quickest and surest way of NOT getting what you want. Atomic air power is the weapon which will deter any aggressor.

Here lies the key to preventing war until man is able to abolish it.

But we now come head-on to a difficult inter-Service problem.

Before air power became a weapon of war, it was reasonably clear in which direction the responsibilities of the armies and navies lay. The navies were concerned with the war at sea, and the armies with the war on land. Even then, navies considered they needed their own soldiers for certain functions, and Marines became a part of navies, and still are.

The advent of air power changed the whole scene.

Armies and navies saw, and still see, in air power a way of concentrating great firepower for their particular tasks, a way of distant reconnaissance, and of striking the enemy beyond the range of guns.

The cry went up for air forces to support armies, and for air forces to support navies. They each got what they wanted, and some more than others.

This surely is *not* the way to use the decisive instrument of warfare. We want to release the air forces from bondage and forge them into one mighty weapon.

What has gone wrong is that today each Service tries to be self-contained and in a large measure it succeeds. In this struggle between the Services there is duplication, and naturally wastage.

On the other hand, *so long as we have three fighting Services*, there is a need for each Service to have certain additions if it is to carry out its functions efficiently, and this principle must be accepted. Let us examine this problem for a moment.

*Navies* require aircraft for locating and destroying submarines and for the defence of fleets at sea. So far as we can see at present, aircraft cannot be operated economically or efficiently in mid-ocean against submarines, or indeed against raiding cruisers, unless some form of floating airfield can be provided there. For these reasons there may always be a need for vessels from which to operate aircraft. But with progress in vertical take-off and landings, we should aim to design something smaller and cheaper than the present aircraft carrier. We could then dispense with the *present form* of aircraft carrier, which is very expensive.

There is also a definite role for navies in the offensive use of short-range ballistic missiles fired from submarines, or from ships specially designed for the purpose.



*Armies* need their own limited facilities for intercommunication, for artillery spotting, and possibly for *short-lift* air transport in forward areas. *Armies* also need *long-lift* air transport on a vast scale; but this must be provided by air forces, since it involves the whole realm of command of the air.

*Air forces* need air-sea rescue services, and units of ground airmen to defend their own bases.

#### THE LIMITS

Once we go beyond these broad limits, there is no restraint. The Service 'empires' expand, overlapping and duplication begins; we at once run into grave financial problems.

If there is an apparent need to go beyond the broad limits I have outlined, then I consider there are three things wrong:—

- (a) The Services do not trust each other.
- (b) Service Chiefs are compelled, possibly against their will, to be protagonists of their own Service.
- (c) Wrong policy or plans have been made.

#### CONCLUSION ON ECONOMICS

The above are my views, in outline, on the way we should approach the problem, haying in view the definite need to balance expenditure on defence with economic possibilities and practical realities. What it amounts to is that there must be a new approach to the whole problem. But again we run head-on to a difficult problem. It is this.

The keyword of the old world is tradition; the keyword of the modern world is progress. These two guiding principles are in direct opposition to each other. I hold the view that when the two meet, if a compromise cannot be found it is tradition that must give way. Only by so acting will the new approach be successful.

I am quite certain about one thing. The more we mess about with old organizations designed for conditions that will not recur, the further we shall get from the right answer.

#### NATIONAL SERVICE

There are two more matters to consider: one is National Service and the other Mobilization.

National Service is an essential feature of modern defence. It was designed initially to meet the conception of a 'nation in arms,' and the creation of large reserve armies in Europe. The old system depended on adequate warning of war and time for mobilization. The present system is geared to the old concept; this does not fit the modern picture in Europe.

The first requirement of National Service today is to enable a nation to have highly trained and highly disciplined active forces 'in being' in adequate numbers, in peace and in war. The second requirement is to provide an adequate trained reserve to maintain the active forces in battle, and to provide disciplined troops to look after the home front.

To meet these requirements, the length of National Service must be sufficient to train the active forces up to the high standard required for a future nuclear war. I



do not know if the Services can possibly manage with fewer men; that would be for them to say. But the men they get need to be kept for two years; this is a military necessity, for the reasons I have given.

It is clear that the object of National Service today in Europe is the reverse of the original conception, and the whole system needs to be examined against the background outlined above.

#### MOBILIZATION

The object is to put a nation on a war footing as quickly and smoothly as possible. It embraces the whole nation and includes :—

- (a) Mobilization of the armed forces.
- (b) Mobilization of the home front, in order to stand the first nuclear shock and to conduct subsequent counter measures.

Present mobilization schemes are archaic against a background of nuclear war; they are geared to the old concept of a 'nation in arms,' with adequate warning of war and time to mobilize. Future mobilization plans must be geared to the requirements and tempo of a nuclear war, with surprise attacks, and warning reduced to a matter of hours, and possibly minutes.

On national radio warning, reservists must know where to report, and must be able to get there in spite of destroyed communications.

It is 'time' that will matter, and speed of mobilization is vital. The immediate requirement will be a certain number of men *very quickly*, and at the right places.

Present mobilization schemes require overhaul against the background outlined above.

#### THE SHAPE OF THINGS TO COME

We are now in a position to be able to suggest some firm conclusions.

A nation must first get its affairs so organized as regards its manpower, its production, and its mobilization, that it can take the strain easily and quickly if a war crisis should arise. This involves clear thinking on the subject of the armed forces, which have got to be organized within the limits of financial possibilities.

As regards air forces, it is clear that the tremendous destructive power of the nuclear weapon, and the advent in due course of long-range and short-range ballistic missiles, will eventually call for a *decrease* in the numbers of manned aircraft. As we progress scientifically, so we must reduce in manpower and bomber aircraft. One thing, however, is essential: all bombing and ground attack aircraft must carry the nuclear weapon.

Land forces must be organized so that they are linked to an atomic capability. Armies must cease to rely as in the past on a superiority in manpower to overcome the growing power of the defence; they must be organized with *less* manpower and *more* firepower. Supply and maintenance must be based on a larger number of small dumps in forward areas rather than on a few large depots in back areas. It must be understood that fighting on land will be heavy and continuous, and Divisions must be so organized that they can fight effectively for prolonged periods without relief or reinforcement.

It is sometimes considered that the day of the navies is over. I disagree profoundly. Indeed, it may well be that the navies will play a definite part in saving us from complete disaster after a heavy surprise attack.

What will happen in the opening phases of a global war in which nuclear weapons are used from the beginning by both sides? Let us examine that problem.

*Air forces* and their land bases will suffer from surprise attack by ballistic missiles with nuclear warheads, both long-range and short-range.

*Land forces* will suffer also, and their logistic organization will be gravely disturbed.

On land generally, great destruction will be caused to centres of government, large cities, and communication centres. All movement on land in rear areas will be rendered difficult, and indeed almost impossible for reserve army formations.

*Navies* will escape damage initially so long as the fleets are at sea and suitably dispersed. If they are to escape detection and damage, it is important that they should not constitute too great a strategic threat to the enemy.

The fleets at sea, in being, may therefore be the only undamaged echelon in the armed forces after the initial clash. Later they will be found and attacked. It is essential they should survive such attack, and be available to help the rapid recovery of the situation on land. I believe that the correct organization of naval forces may well be an important factor in helping to tip the scales in our favour.

The control of sea communications will always remain the priority task for naval forces, the main threats being air and submarine attack.

I suggest that the day of the big ship is over. As I have already stated, navies will always need vessels from which to operate aircraft; in the future I see these ships being smaller and faster than the present aircraft carrier.

It seems to me that the navies of the future must include, amongst other things, a large number of very fast ships of the cruiser type, specially designed for launching ballistic missiles while at sea.

The utmost use must be made by navies of the rivers and canal systems of Western Europe; craft specially designed as launching platforms for ballistic missiles should be able to penetrate these waterways and assist the land forces in their battle.

#### ORGANIZATION OF NATIONAL FORCES

I suggest that the organization of national forces should be undertaken against the background outlined above. In particular, I wish to emphasize the functions and organizations I have suggested for naval forces. Far from having no future, I consider the navies have a future that can be of vital importance: provided they are organized on the right lines, and do not attempt to take on major functions that are more properly the role of other Services.

#### ONE FIGHTING SERVICE: NOT THREE?

Looking into the distant future, we must take as our objective bringing the three Services more closely together: even to the extent of combining them into one. Until this is done we limit ourselves to approaching, but not achieving, an ultimate goal of economy of force in the real sense of the word.

Let us examine this problem.

Progress and development in the modern world have outmoded the old conceptions of the organization of military forces. But we cannot see this, so strong are our habits and traditions. All the great nations today have three Services—Sea, Land, and Air. This separate existence of the three Service results, in every nation, in waste of money, waste of manpower, and waste of time.

If the world were static, and present conditions could be projected indefinitely into the future, there would not be the same urgent reasons for change that exist today, except of course the permanent need for economy of force in manpower, materials, and finance.

But the greatest fact of modern times is that change is inevitable: change in politics, in economics, in techniques, in fact in every field. Progress is not inevitable. Progress depends on courage to make decisions to meet the needs of the times.

The impact of scientific progress makes it essential that we shall be able and ready to adapt ourselves to changes. But the present organization of military forces is incapable of adaptation to changes, neither quickly, nor economically, nor efficiently.

A factor which influences the problem is the intermingling of functions in modern war. Ground forces require the support of air forces; air forces require protection of their bases; both are served by ships which have to cross the oceans bringing fuel, food, and ammunition.

Navies at sea in war and in peace are greatly dependent on flying machines of many types; in addition they can, in many parts of the world, participate directly in the land/air battle with aircraft operated from ships. Today, all these intermingled tactical functions must be co-ordinated by joint staffs, by committees, by agreements between Services. I would add that any agreements reached are always compromises, and are seldom the best and most economical solution.

In basic matters there is continual disagreement between the three Services of a nation, and in some cases there is definite friction. There is hidden suspicion at all levels between the members of all Services, in varying degrees. There is a continual tendency for duplication of administrative services and facilities in all the fighting Services. There is wastage of personnel through the maintenance of obsolete or obsolescent functions in all the Services.

When some function becomes obsolescent, vested interests and emotional attachments go into action to prevent it being abolished, and Service propaganda machines are put into top gear.

The basic reason for all this confusion is wrong organization. The old feudal system, first of two Services and now three, has existed for too long and even today is not much more than a federation of powerful states. What we need is a system of close integration, with a proper function for each Service, on a co-operative and not on a competitive basis.

It is an inherent characteristic of every organization to resist change and to attempt to survive. This results from the growth of 'vested interests.'

But in the future, as political, economic, and technical changes accelerate, *it is a grave question whether any large military organization which is not closely integrated and gripped tightly at the top can adapt itself successfully to the required speed of modern life.* If this is not done, the lack of adaptability of the organization as a whole will tend continuously to promote individual Service interests over those of the nation concerned. Under such conditions, politicians have to step in to keep things going; they do this in the only way they know, i.e., by the creation of *more* committees and by *additional* bureaucracies for co-ordination and arbitration above those already existing.

Political leaders have to grapple with these immense problems by themselves ; there is no one to give them the right answer, as a Service Chief fights for his own corner.

Each Service has developed within itself a system which provides for specialization where it is wanted, and yet ensures overall unity in direction.

But the fact remains that we have not achieved for the three Services in combination a system which is comparable to that which each Service has evolved for itself. We had glimpses of the possibilities during World War II when Supreme Commanders were appointed ; but these have faded out in the British set-up and we are back with our triumvirate of specialists whenever inter-Service affairs have to be dealt with. It is rather as if a ship were commanded by a committee consisting of the Gunnery Officer, the Major of Marines, and the Engineer Officer, each of whom had under him one-third of the crew, and each wearing a different uniform.

It seems to me to be ridiculous to go on in this way. Obviously we cannot today go over to one Service. But we might well introduce such a close integration between the three Services that the final step could be taken without confusion *if it was ever decided it was necessary.*

An essential step would be gradually to produce a new type of senior officer who was trained to be completely inter-Service from his earliest days. This could not be done unless we combined the Service cadet colleges, the staff colleges, and so on, and this I consider might well be done now. The final step would be to abolish the three Services as distinct entities, and organize them into one fighting Service under a single War Department.

I suggest three reasons for this.

*First :* the tasks of the three Services are not nearly so differentiated as they used to be. The Navy flies ; the Air Force devotes much of its effort to crippling the enemy's army and transporting our own.

*Second :* the advance of scientific discovery has produced ideas and weapons which do not fit neatly into the picture of three Services. They tend to unify warlike operations and it is more important than ever before that objective minds should examine the application of science to war.

*And third :* our nation is going to find it difficult to maintain defence expenditure at the present level. We cannot afford the luxury of duplication, and the waste which comes from adding together the demands of the three Services.

Time will not allow of attempting to answer the host of objections which will immediately be brought against such a scheme as this. No doubt the difficulties will be immense, and Service propaganda machines will make them appear impossible to overcome. Tradition will be put forward as a reason against changes. Tradition is a wonderful thing, but it must not become a bar to progress.

The point to note is that the rewards for success, and the penalties for inaction, are so great that something must be done : and done immediately. The changes would produce an equally good defence organization, indeed it would be better. And the financial gains would be tremendous, resulting eventually in reduced taxation and a better standard of life for all.



## THE RIGHT ORGANIZATION AT THE TOP

It is clear that there is much to be done to get defence organizations geared to the requirements of future war. Whatever is done must begin at the top. If the organization there is right, progress will be possible. If the organization at the top is faulty, there will be no progress.

It would be impossible to carry through a major reorganization of the defence needs of a nation, on the lines I have suggested, with the present set-up that exists in some nations. I refer to the committee system of management. A good example of that system is found here in London, where at the top is a Minister of Defence who is merely a 'persuader,' with no real power; and right down the chain the professional side of defence is run by committees, boards, and councils. The committee system of management is out of date as far as defence is concerned; it is totally unsuited for modern times.

A Minister of Defence has got to produce a sound defence with the right balance between air, sea, and land forces; all within definite financial limits. He will never achieve any economy so long as all he can do is to add together the demands of the three Services. He can achieve nothing in these matters unless he has power of decision.

In modern times, a nation needs a Defence organization on the following general outline.

(a) A Minister of Defence, who has real power of decision and action within the limits of Cabinet policy. He should be responsible for air, sea, and land forces, and also for civil defence.

(b) An Under-Secretary in each Service Ministry; these would direct the organization and administration of their Services in accordance with the definite instructions of the Minister of Defence.

(c) A Chief of Staff of the Armed Forces, who would be the professional adviser to the Minister of Defence. He would issue orders to the three Service Chiefs on defence matters and must have the power of decision in case of disagreements. He must, of course, be completely inter-Service on all matters.

(d) A Chief of Staff of each fighting Service who would be the sole professional adviser to his Under-Secretary.

Today it is impossible for a Head of Government or Minister of Defence to get true and unbiased inter-Service advice. Under the above system the Chief of Staff of the Armed Forces would give such advice.

The first and essential appointment is to make a Chief of Staff of the Armed Forces. It would then be necessary to work out the details of the modern system and to draw up the legislation necessary to give effect to it. The power of decision is then placed in the hands of the Minister of Defence, and Service empires disappear.

I suggest that under the above system responsibility would be clear-cut, argument and vested interests would be stamped on, and things would get done. And after all, this is what we want; to get things done the right way, and quickly.

## CO-OPERATION WITH THE SCIENTISTS

Let us take a quick glance at the future. I consider that this lies in the hands of the men of science.

Today some of us may feel we are living in the era of ultimate weapons. I suggest we are really in a transition period. There is much more to come.



Within the next five years the guided missile will be with us. Within the next ten years there will be an operational, inter-continental, ballistic rocket carrying a nuclear warhead. Never has it been so necessary for the fighting men and the scientists to work closely together, and for the Service Chief to say clearly what he wants from the scientist.

In my address here last October, I quoted the following verse from the New Testament: "If the trumpet give an uncertain sound, who shall prepare himself to the battle." (1 Corinthians, 14, 8.) I often think that today, when Service Chiefs talk to the scientists, the trumpet gives out a most *uncertain* sound.

Shortly after the ballistic rocket will come the unmanned satellite.

I read recently in a newspaper a statement by a scientist that there is no sound military requirement for this device. I disagree profoundly. I remember a statement made some 40 to 50 years ago; "There is no sound military requirement for the aeroplane." What these statements really mean is that man's imagination is deficient. A few years hence we will look on such a statement about the satellite as rubbish.

The military requirement is that a large unmanned satellite could contain television, photographic, and communication equipment. It could televise pictures of world-wide cloud formations, thus allowing the continuous location of storm centres and areas of good weather. This capability to view the weather from above as well as below would advance meteorology; such an advance would have military value, particularly for air operations.

The satellite could look down on any desired area several times in each 24 hours. The information thus gained would depend on the state of development of radar, visual optics, and television technology. The pictures taken would be automatically developed and sent back to earth by radio. The advances that would accrue to mankind in general, and to the military in particular, are of course impossible to predict accurately. If they could be predicted we would not need the satellite.

It is clear that there *would be* advances; some of them might completely overshadow all advances up to date. In any case, the scientists would get a fresh, unhampered view of the earth.

#### THE CONCLUSION OF THE WHOLE MATTER

In this address I have put before you the organization for defence that, in my view, is essential in modern times. You will have gained the impression that if some criminal lunatic should loose war on the world, the Western Alliance would win so long as we have the right organization and the right forces. That is better than thinking we would lose.

I now put it to you that the words 'win' or 'lose' no longer apply to contests between nations which have nuclear power of any magnitude. If attacked, our aim must be to impose our will on the enemy. But the price will be heavy.

I have been studying nuclear war for a considerable time and I have come to the conclusion that man will have it within his power in the future to destroy himself and every living thing in this planet. I do not believe this to be man's destiny. But we must face the facts *now*, or it will be.

War is not an act of God. War grows directly out of the things which individuals do or fail to do. It is, in fact, the consequence of national policies or lack of policies. Do not let us fail to do the right things now. Our aim must be to prevent war; the prospect of winning or losing is not a profitable subject. We must find another court of last resort for adjusting political differences.

You may say: "How can we prevent war? Man has been warring since the dawn of history. Why should he change his ways now? Man will, as far as one can foretell, always make war unless there is some powerful deterrent to prevent him."

Here lies the key to our problem.

The *banning* of nuclear weapons will not give us peace. We will get lasting peace only by *having* the nuclear deterrent, as no nation will risk its own utter destruction by bringing on a nuclear war. But there must be no hanging back, no flinching in the crisis; the unflinching deterrent will produce peace.

What then has to be done to ensure that war will be categorically unprofitable?

This question is not easy to answer. But the 'Pax Atomica' should be the basis of the plan, until man can bring about the abolition of war as a means of settling international disputes: which is a problem for the political leaders to solve.

Then I suggest that if we can give sound solutions to two simple questions, we Service Chiefs will have given our contribution to the answer.

The two questions are:—

*First*: How should the armed forces be organized in order to achieve maximum strength and thus act as a positive deterrent to war?

*Second*: How is this best done within the limits of economic possibilities?

In the address I have given you, I have endeavoured to point the way towards the answers to those two questions.

#### SUMMARY

As far as I can see, in any global war that may come upon us in the foreseeable future, air power will be the dominant factor. This fact being acknowledged, it will then be necessary to ensure a proper balance between air, sea, and land forces. I would like particularly to mention the necessity for German land forces in the Western Alliance on the scale now planned.

As air forces develop through the jet bomber to the ballistic missile and the satellite, the world balance of power will become progressively more precarious. We must build up a powerful deterrent to war as our first object; having done that we must seek to bring about some measure of world-wide disarmament.

We must get the right organization for modern defence from the Minister of Defence downwards. That organization must be one which gives power of decision to the Minister of Defence and to his Chief of Staff of the Armed Forces.

Having got the right organization at the top, we must bring about a very close integration of the three Services, welding them together on a co-operative basis.

Overall, we must tackle the economics of defence as a matter of urgency.

Finally, we must understand that we are in the midst of a scientific revolution and we cannot stand still or put the clock back. We must go forward into the future, working for a sound balance between tradition and progress.

#### DISCUSSION

THE CHAIRMAN: Gentlemen, the meeting is open to discussion now. The object of this Institution is that it should be a forum for the discussion of military matters of an inter-Service nature. The Field-Marshal has told us one or two things which I think a lot of us would like to discuss.

He has drawn attention to the limitations of financial economics. It strikes me that there are, in addition to the financial limitations, the limitations of manpower which are

limiting both in peace and war. Again, there is the very strong limitation of industrial capacity. Perhaps one of the biggest deciding factors in the procurement of equipment is the productive capacity of the Country. So I would draw your attention to those factors as well.

The Field-Marshal has drawn attention to what he says is a very competitive state of affairs as between the three Services in countries generally. I know he is not attacking our Country particularly.

THE LECTURER : Oh, no !

THE CHAIRMAN : Now, is the competition as bad as all that ? I think that is worthy of discussion. He also said that when we start we go into one of the three Services, in any country, and we live in water-tight compartments. Perhaps we do—but do we do it as badly as that ? And is it a good thing ? Do we not get greater professional proficiency within our three Services by being a bit competitive ? I do not know. I hope those will be points which will be brought out in the discussion. He has also referred in some detail to his ideas on the organization of land forces. He has referred to what he calls 'a standard division,' and he has referred to what he calls 'armoured brigades' rather loosely, if I may say so, under a major-general. Is that good ? He has also mentioned the idea that not only should the Navy fight at sea but it should fight up rivers. Well, navies have been up rivers in the past. The Dutch fought some very fine wars on inland seas and beat the Spaniards.

THE LECTURER : And up the Thames, too !

THE CHAIRMAN : And up the Thames, too. I thought that was a little indelicate ! Do those ideas meet generally with yours ? Those are some of the points which I hope will come out in this discussion which will follow now.

LIEUT.-GENERAL SIR BRIAN HORROCKS : May I ask one question ? You say in fact in this lecture that air power is the dominant factor. We have been hearing a good deal about long-range inter-continental rockets with a range of something up to 5,000 miles, and we have also heard something about satellites which hang about up in the sky. Can you say how they will fit into this picture, and are they likely to come along shortly ?

THE LECTURER : I did say that, as we progress scientifically, so we must cut the bomber strength. As short-range rockets and then inter-continental rockets become available, so you can reduce in what we call today the manned aircraft. That, I think, is quite clear. Now, scientifically I will say this : that in five years time we shall have with us the guided missile, which is a short-range ballistic rocket, with a range of 350 or 400 miles. In ten years time we shall have the inter-continental ballistic rocket with a range of—you suggest 5,000 miles, and I understand that is scientifically quite possible. These scientific advances pose tremendous problems which must be studied today because they completely upset the whole of the present conception of air defence with radar screens, early warning, and all that sort of thing. But they are coming. So I think the real answer is that we must understand, from the point of view of manpower and money, that as this scientific progress moves ahead, so we must cut manpower and the manned means of delivering our bombs. They must go. That has got to be understood by the air forces. I have no doubt the air force would say : "Well, that being the case, when these things come along we must handle them, otherwise we might go out of business." That might be said. You will therefore see that when these weapons do come along, how much easier it would be if you had the three Services under one Ministry. And if you only had one Service to make use of this tremendous scientific progress, how much simpler everything would be from a manpower point of view, from an equipment point of view, from a money point of view, and from an economic point of view generally ; there would be no duplication, and moneywise that is frightfully important.

SQUADRON LEADER J. CULLIFORD : You said that air power was vastly important, and you also suggested that some reorganization of the three fighting forces would appear to be necessary. I would like to suggest that in actual fact you have not gone far enough.

It would appear possible that, should any thermo-nuclear war suddenly strike us, it might well put this Country, or possibly the United States, or possibly the enemy (either one of us or all three of us) in ruins—utterly and completely smashed within two days. I therefore cannot see the need, with such a possibility in view, for large armies or large navies. I would suggest that the days of massive numbers of men marching ponderously to and fro, large convoys of tanks charging to and fro, or large fleets of ships sailing to and fro, are out; and I would suggest for consideration that what is more likely is a small, very highly trained army for police duties after the war has been won by an atomic attack, and likewise a small, very fast-moving navy of small ships for similar duties in home waters and at the outposts of empire.

THE LECTURER: That is a philosophy which is very interesting, and of which, of course, I have personally heard before: that the air force will win the war and we need not bother any more about it. I do not hold to that philosophy myself. I think it is arguable, and it may be that I am wrong; but I personally do not hold to it. I do not believe that a good nation, a decent nation, will crack up in two days. I do not hold to the view that this Nation of ours, even with the terrific destruction which we know might happen, would crack up in two days. And certainly not if we had a Churchill about—never! I think that in the next war, although these new scientific weapons will cause great destruction, they will be limited in numbers. They are very expensive, and a good many of them will, I think, be expended in the first opening clash. Both sides will go all out to start with to try to gain the advantage initially. But I see the war itself going on for quite a long time, provided the people are geared for it. I think that in the conduct of this war, in a great clash between East and West, there will be tasks on this earth which will call for sea people, air people, and land people; those tasks will be there. What I do hold with is that we have now got to study what those tasks will be and to forget what they were in the past. I think the navies will escape damage in the initial clash, if they are at sea, suitably dispersed. They will then be intact, and available to help in the rapid recovery of the situation on land. You talk about small armies being needed afterwards. I think the small armies—highly mobile and good armies—will be wanted to begin with, because while the great exchange is going on in the air you do not want the other guy to come in and occupy your country. So I would not hold with your philosophy. I think that is going too far.

I do not wish to be insulting in any way, but yours is an extremely "air" viewpoint. I myself try to look at these matters from a completely inter-Service point of view. If war comes, there will be fighting in the air, on the sea, and on land. The problem then is how to get the right set-up to deal with the whole matter in the new conditions. I do not think you can get it right by abolishing the Army and abolishing the Navy and having only the Air Force.

SQUADRON LEADER M. G. DYER: Could I ask if you do not think, for the type of force which you are foreseeing and bearing in mind the principle of economy of force, that the time has now come to have an entirely new concept of accounting in the three Services? The illustration which comes to my mind in respect of my own Service is this—and the figures which I give are purely hypothetical. At present, if we have a bomber force of 200 aircraft, which represent a capital value of £10 millions in money, 10 per cent. of them may well be grounded for lack of spares. With a change in the system of accounting it might be possible that the lack of spares could reduce the figure to five per cent., and our unserviceable aircraft through that cause would be reduced to 10, making our striking force that much stronger. As I see it, at the moment our own Service is geared to an accounting system which might be very good for accounting for balls and muskets and coats (red) but not for the needs of the three fighting Services today.

THE LECTURER: I do not feel competent to discuss the very tricky business of spare parts for the V-bomber, but there is probably much in what you say. But, considering the question of accounting in the Services in general, I would like to say this: that if



you think the accounting system for the Royal Air Force is suitable for Peninsular War days, then I would say that the accounting system for the Army is suitable for the days of Moses, if not of Abraham! (*Laughter.*) The accounting system in the Army is based on the fact that everybody is a crook; and if he is not a crook, then the system makes him one very quickly. It is a most frightful thing, this distrust from the top—but nobody is trusted. I was talking only the other day to a commanding officer who told me that so far in this year, 1955, his quartermaster had put in 9,000 indents. Each indent had to be in quintuplicate, so that there were 45,000 bits of paper to be signed. I should have thought the Army could have a system by which, if a quartermaster wanted a frying pan, he could go straight to a depot, draw it, and sign for it. And if his unit, on a snap inspection, was found to have too many frying pans, well, sack the Colonel! You would get somewhere then. And, of course, the saving in manpower and civil servants and so on would be terrific. If people were trusted, the Army would lose far less money than it loses now. So if you think the system in the Air Force is bad, you just come and look at the Army system! The whole question of paper, which is simply frightful, also requires to be examined. No intelligent person can read half the papers produced, and, as I said last year, the other half is not worth reading. Does that answer your question? (*Laughter.*)

BRIGADIER B. B. RACKHAM: The Field-Marshal indicated that the role of the reserve forces had changed, and that their present organization was quite out of date. I do not think he indicated what his views were as to their present role. Could he enlighten us on that point?

THE LECTURER: I cannot give the answer to that question without first giving you some of the background to it. In the past, in two great world wars, we were faced with a long contest of attrition lasting four to five years. The first phase, lasting about one year, was spent in getting the nation geared to handle total war as regards its manpower and production. The second phase was one of decisive operations while the nations operated offensively in accordance with a master plan. This phase lasted about two years. The last phase was one of exploitation, finishing off the business. That is what happened in 1914-18 and 1939-45. The whole endeavour took about four to five years. Because of the conditions of the problem and the tempo of war as it was then, you had warning of war and time to mobilize. You had to have big reserve armies and the nation sprang to arms. But I do not think that will happen next time. Because of the capacity to destroy, in future war the decisive phase will be reached very quickly. The effect will be that the forces you need for decisive operations cannot come into being after mobilization. They have got to exist in peacetime; they must be held at a high state of readiness and must be able to fight effectively without any mobilization procedure. It is therefore, in my view, a waste to spend money in peacetime on forces which cannot be of any use to you until the war has been going on for six months or a year. You have not got the money for it. The money must go into the front-line strength, to link it with the atomic capabilities. On the outbreak of war you will want a small reinforcement for the land armies available very quickly. Whatever you do have in that line, you must be able to mobilize at once to go straight into the war. Now consider the present Territorial Army. The Territorial Army consists of about 12 divisions; but on no account could that Army go to war tomorrow morning and fight effectively. It would lack leadership, discipline, and training. It is not its own fault. It was not designed to do so by Haldane. Haldane designed that Army, as others also designed their armies, to follow when the Regular Army had held the fort for about a year. And that is of no use in the changed conditions of modern war. This Country could probably produce a reserve army of one army corps, three divisions, at once. But to do so, that army would have to go into camp every year, training properly for at least a month. It could come up at once on the outbreak of war and be used straight away on defensive tasks, provided it could be got out of the Country. So I think that the function of the reserve army is to provide something good, very quickly. Moneywise it cannot be large. It is not the function of the reserve army to



come along after a year and take over the fighting from the Regular Army; the whole tempo of war has completely changed its function.

BRIGADIER RACKHAM: Thank you very much.

AIR CHIEF MARSHAL SIR PHILIP B. JOUBERT DE LA FERTE: As one who has been responsible for a certain amount of controversy lately, I feel I would like to say how much I have enjoyed the Field-Marshal's lecture, and how much I agree with him. It is delightful to see foresight and progress combined with moderation. There is one point which I would like particularly to emphasize which he stated in his lecture, and that is over this question of the unified Service. Personally I am too old and perhaps too 'die-hard' to conceive of a completely unified Service for at least a generation. But what I do see is a corps of officers which is capable of co-operating and combining to a common end, having a common doctrine of war, and having a common doctrine of waging war. When the I.D.C. was formed many years ago (I was the first Air Force teacher there), that conception was in the minds of two great men, Lord Trenchard and Sir Maurice Hankey, and there is no doubt in my mind that the work done at the I.D.C. was of fundamental importance during the 1939-45 War, because whenever you had to work with an ex-I.D.C. student you knew you would get on. I would say that the idea of the combined cadet college should be followed up by other combined staff college training as squadron leader, major, and lieutenant-commander level, and again further training at brigadier, captain, and group captain level, so that ultimately the pick of the people would be ready to work with and to provide an adviser to the Ministry of Supply, who would be really capable of giving inter-Service views. I do not see yet that there are many people who are completely divorced from Service prejudice and tradition, but a lot of training is still needed before we see a really desirable result.

THE LECTURER: The Air Chief Marshal mentioned the I.D.C. I was never considered adequate to go to the I.D.C. (*Laughter.*) I did hope that one day I might be sent there, but I never was. Now, I will go back to what I said about this question of one Service. I did not say that it could be done at once, but I do think that we could so integrate the Services on a co-operative basis that if it was ever necessary to take the final step it could be done without confusion. I also said that, as a start, you could amalgamate the cadet colleges and the staff colleges and so on now. The Air Chief Marshal says that it is difficult to find a man who has an inter-Service philosophy, and who is divorced from Service prejudice. Why is it difficult? It is difficult because, certainly in my Service, a young officer does not see anybody from another Service until he has reached the rank of major. He first goes to Sandhurst and becomes a soldier in a small box; he goes up the ladder and does not see anyone but soldiers until he goes to the Staff College; and if he does not go to the Staff College he never, in the whole of his service, sees anyone from another Service. I think that is bad. I think if you could get the three cadet colleges together, at least a sailor would start by knowing a few soldiers (they are quite nice people). I entirely agree that you cannot possibly have this one Service today, but I believe it has got to be considered as a thing which might come—in a generation certainly; but it will not come (I think this is the point made by the Air Chief Marshal) unless we do something about it now. I look forward to the day when, after you become a colonel or a group captain, you go on to a common list. I do not see why a rear-admiral should not command a division. (*Laughter.*) I would have no hesitation in commanding a fleet! The fleet would at least know what to do! And I would have no hesitation in saying that they would do it. But I think the point is that we will not produce people with an inter-Service outlook unless we do something about it now; that is the point.

CAPTAIN G. S. HATCH: Each year now that we have got more of the Regular Army back in this Country, a bigger burden seems to be placed on the active units in sponsoring reserve army camps to the detriment of their own training. In view of what you said about reserve armies, do you think that this effort is justified, and do the other nations in N.A.T.O. do it on the same scale?

**THE LECTURER :** I think you would probably have to get the answer to your question from somebody who was really in close touch with that particular business, because I am not. I am an international person, and I am not in sufficiently close touch to know whether the effort that is being put today in the Territorial Army training is worth-while expenditure of time and effort and money. I have said that reserve armies should be much smaller and in the case of some nations should come down to, say, one corps, and that anything above that is a waste of money. I did say that. If the philosophy which I have indicated was adopted, that is that your reserve army should be small but very good, I think it would largely relieve the Regular active army from the problem of sponsoring T.A. units. I did also say that the Regular active forces in being have got to be at all times ready to fight at once. They have got to be kept up to establishment and do their proper training and so on. They should not be diverted endlessly on to side issues. In continental armies the problem of training reserve divisions is rather different. You find that a reserve division is called up for training, and men go and do refresher training at a depot; but the division itself is never functioning. There is no case that I know of in Continental Europe where a reserve division ever puts out to sea on a training area with all sails set under its own general. That is why I said that no reserve division in N.A.T.O. could be of any use in any war for at least six months.

**ADMIRAL OF THE FLEET SIR ARTHUR POWER :** Would you object to your "Global Command and Control in War" reading: "Global Command and Control in Peace and War"?

**THE LECTURER :** That is a very interesting point. I would like it; but I did say that it is just a question of how much of this can be done in peacetime. I also said that if you did not have the set-up ready to execute your operations efficiently from the word "Go", then you would probably go under. Therefore, if you do not have at least the outline of the set-up in peacetime, you are done. Now, would you today get our political leaders to create this organization? I would doubt it. But I would say to them, that the first step they should take is to agree that this is the sort of thing we want. It might then take some years, even, to get the outline of it. But today it has never been agreed that this is the sort of set-up we want. I would certainly like to see the organization set up in peace and in war.

**BRIGADIER A. F. J. ELMSLIE :** Do you think that a logical step towards a single Service, and one perhaps leading to some economy, would be the amalgamation of the administrative services—for example, medical, supply, ordnance, padres, and so on?

**THE LECTURER :** There again, your suggestion is not a new one to me. I would say "Yes." I think that all those facilities and administrative matters want integrating. They are all part of the game. But I do not know whether, when you tried to do it, the people concerned would not prove to you that it would be more expensive. Being a common-sense sort of person (that is all I claim to be), I should have thought that by amalgamating these facilities you would save money and manpower. You would have one padre service for the whole box of tricks, one medical service, and one supply service. What have we today? The Navy has one contract for food, the Army has another, and so on. Why not have one branch which would place the contracts for all the food and boots and clothes? The Navy has one helicopter, and the Army has another helicopter. Why not just have one helicopter? Do you come from the War Office? (*Laughter.*) Now, the Quartermaster-General is here this afternoon, so let us see what he has to say about it.

**GENERAL SIR MAURICE CHILTON :** I think there is a good deal in it, but supply is rather different in ships, of course, compared with armies. I should think that the Air Force and the Army might join up more than they have done, but I am rather doubtful about the Navy, because their business is rather different, and they have to organize rather differently from us.

THE LECTURER: They must all have food! Basically they are all the same chaps: they are all good English boys—"and Irish!"—and Irishmen, yes. Anyhow, I think the answer is that there is a great deal in what you say, and it has been brought to the attention of the highest authority. (*Laughter.*)

SQUADRON LEADER D. E. ADAMSON: I gather from the preceding remarks of the Field-Marshal and from the chart on the left that one of his air commands would include the British Bomber Command, and that would mean that the direction of its use would rest with the Supreme Military Authority for the direction of global war. Very shortly, we hope, Bomber Command will be an atomic or nuclear striking force, and I believe that the force was conceived or designed as an instrument of national policy. I think we all know how contentious the use of a bomber force can be, and the difficulties in choosing its target systems. Would we be wise, therefore, as a nation, to surrender to the global authority this very powerful instrument of national policy?

THE LECTURER: Once you start that game you come straight away up against the question of: "Do we belong to an alliance?" Do we trust the other members of the alliance? Are we prepared to let some international set-up at the top, like the Combined Chiefs of Staff, handle the air war? If we are not, then we lose. If the Bomber Command are going to sort of flit about on their own, then we lose. My answer would be that, belonging to an alliance, and this being a life and death struggle for absolute survival, it must be centrally directed. I did say that the supreme military authority would allocate resources to these air commanders in accordance with their countries' logistics and so on. One of these three chaps would be in the United Kingdom in an East-West war, and I should have thought that, being in the United Kingdom (I have not attempted to say where the others will be, because I did not think it would be wise), I would be quite prepared to put the British Bomber Command under that man. He would certainly be a British Air Chief Marshal, and the one in North America would be an American. No, I do not think we can have that game. If every nation wants self-sufficiency and wants to employ its own forces in its own way, you will not win the war; you will lose the war, I am certain, if the words "win" or "lose" have any validity. We will be at a disadvantage unless we forge air power into one mighty weapon, and you being an airman ought to be extremely pleased.

LIEUT.-COLONEL R. D. WILSON: Would you please tell us whether you can foresee any important roles for airborne forces as opposed to air transported forces in a future war?

THE LECTURER: That is a very good question—an extremely good question. I must go back to something which I said during the course of my talk. I said that it was a mistake to spend money in peacetime on things which are not going to be of any use to you until the war has been going on for some time. Now, take that principle and apply it to an airborne division. You rightly separate the airborne division from the air-portable division. My view would be that all reserve divisions should be air-portable. I would say that the expenditure of money on an airborne division, as we understand the term today, is not justified when money is scarce, because you cannot use that airborne division until you can use the sky, and I do not see that you will be able to do that at once. I think that a nation wants an airborne set-up where the germ of airborne warfare is kept alive all the time. I am thinking now of the Independent Parachute Brigade at Aldershot, and I would never do away with that if I had anything to do with the British set-up, which I have not. I would keep it, because I think it might be on that that you could expand. I also think that in a future war you have got to have some highly trained airborne set-up which you can use, for instance, to seize an area at night and bring in the air-portable echelons at dawn. I think that is the value of that airborne parachute brigade at Aldershot. That brigade is very highly trained, they are very good chaps, and it is a very powerful outfit. I think that every large nation ought to have a similar type of organization.

COLONEL L. V. S. BLACKLER : May I ask, with regard to the preliminary war against bureaucracy, how does the Field-Marshal consider that we should win this essential paper war ?

THE LECTURER : Is it agreed that there is a paper war ? I would say that it is agreed. I should have thought that you could have cut down paper by doing things verbally and by telling people what you want. What happens now is that you must write everything out before someone can act on it. I should have thought you could tell someone what you want, and if he is not able to act on what you tell him, then you sack him and get somebody else. In the war I trained the Generals who worked under me to take verbal orders and to understand them, and I learned, as the war went on, what sort of verbal orders you could give to what sort of people. Some people wanted rather more details, and others would act on more general instructions, and so on. Cannot we get down to that ? Why must we write all these reams of stuff ? But I think it has got to start at the top ; it has got to start in Whitehall. They are the people who have got to stop it—and they are the worst offenders. It is no good saying " Stop it down below " if you do not stop it at the top. So the answer is to launch an offensive on Whitehall. (*Laughter.*)

MAJOR-GENERAL O. P. EDGUMBE : The Field-Marshal said (in an aside to the Press) that he would like to telephone Margate about National Service. Could you say what your reasons would be if they telephoned back and wanted to know your reasons ?

THE LECTURER : I did not say that I would personally telephone Margate, but it might be suitably put across to Margate on the telephone. I gave the reasons in my lecture, and I gave them fully. The reasons are that the whole conception of National Service today is changed, and that the function of National Service today is to provide an active force in being with an adequate supply of trained and disciplined men. For that purpose, two years National Service is essential.

THE CHAIRMAN : Gentlemen, there must be many others who would like to ask questions, but time marches on, and I think it is time now that we thanked the Field-Marshal for his extremely stimulating and interesting talk. I have not got many observations to make, but I have just one or two.

I do not think we want to go away from here with the impression, which some of the younger generation here may have (not the older and more experienced officers), that there is not a great deal of inter-Service co-operation going on today. There is, of course, an immense amount of it. Young officers go to the Joint Services Staff College, and we attend each others' staff colleges ; and we send some to the United States. There is the I.D.C. and there are Joint Planning and Joint exercise planning staffs in existence all over the place. All these people are used to working with one another. There is a great deal of that going on which I think some of the younger generation may not be aware of.

But I would take up one point with the Field-Marshal, and it is that if I had an admiral commanding one of my divisions I would put my hat on. (*Laughter.*)

I think, with that last sally, it only remains for me to thank you very much on behalf of the Institution for the most stimulating and interesting talk and discussion. Thank you very much. (*Applause.*)



# ALLIED DEFENCE CO-OPERATION IN THE FAR EAST

By GROUP CAPTAIN E. A. WHITELEY, C.B.E., D.F.C., R.A.F.

## SECTION I—INTRODUCTION

### THE PROBLEM

**J**UST before the Manila Conference of September, 1954, an American weekly reviewed the promised attendance and commented on the prospects of the meeting producing a useful defence treaty for South-East Asia. The magazine's conclusions were: "Out of such a conglomeration is apt to come a maximum of rhetoric and a minimum of commitment."<sup>1</sup> It is still too early to decide whether the commentator was right, but sooner or later it will be for decision by the Commonwealth countries concerned whether the South-East Asia Collective Defence Treaty<sup>2</sup> is worth while—and if worth while, whether, in conjunction with A.N.Z.U.S.<sup>3</sup> and A.N.Z.A.M.<sup>4</sup>, it is adequate.

The remarks that follow arise from a study of the *military aspects* of this problem. They concern:—

- (a) The spheres in which international co-operation is necessary for military efficiency and economy, and
- (b) The directions in which taxpayers of Australia, New Zealand, and the United Kingdom might expect further progress to be made.

### SCOPE AND ARRANGEMENT

I have emphasized 'military aspects' because the present cold war is primarily a political and an economic conflict. The proper conduct of these non-military campaigns is of transcending importance, but because of the influence of fear and the importance of confidence, there are two associated military requirements which must be kept in mind. First, an essential contribution to the winning of the cold war is to show that we are ready, if challenged, to engage effectively in a large scale hot war. This demands a reasonable allied military posture which is scarcely possible in the Far East without an agreed allied defence policy and co-ordinated military preparations on an appropriate scale. Secondly, we must be able to deal effectively with any limited war which our policy demands, such as those which have already occurred in Korea and Indo-China. It is only in relation to these two military requirements that a serving officer is qualified to comment on the adequacy of S.E.A.C.D.T.O.<sup>5</sup> or other international agencies.

To evaluate any organization, it is necessary to have standards. Section II therefore reviews the defence functions which ideally require some degree of international co-operation if the Allied and Commonwealth defence effort in South-East Asia and the Far East is to serve its purpose, and be provided at the minimum cost to the taxpayers. Section III is a survey of the existing machinery for co-operation in relation to these standards.

This survey discloses many shortcomings. In Sections IV and V some of the current difficulties in achieving full allied international co-operation are noted.

<sup>1</sup> *Time Magazine*, 23rd August, 1954, page 20.

<sup>2</sup> The Treaty signed at Manila—usually abbreviated S.E.A.C.D.T. ("Seacadet").

<sup>3</sup> The Treaty between Australia, New Zealand, and United States.

<sup>4</sup> The defence arrangement between Australia, New Zealand, and United Kingdom with reference to South-East Asia (particularly Malaya).

<sup>5</sup> South-East Asia Collective Defence Treaty Organization.



Certain interim improvements to the machinery which might be easier to arrange in the short term are suggested.

#### THE AREA

Obviously the first requirement in a shrinking world is for co-ordination of allied strategy on a *global* basis. This is a task which falls primarily on London and Washington. A discussion of it is not within the scope of this article.

Below global level, military activities against Communism can be divided into those which primarily concern the western sphere and those which arise in the eastern sphere. These two portions of the Communist periphery are separated from each other by the uninhabitable Arctic wastes at the top of the Communist bloc, and by neutral India at the bottom. On the western front, allied military policy is co-ordinated by N.A.T.O. Similar co-ordination is required in the eastern hemisphere covering the front from Japan and Korea to Burma and Malaya. To the Communists, with their interior lines of communication, Korea is only one day's flying away from Bangkok, from our oilfields in Borneo, and from Singapore. Some American F-84 fighters have just demonstrated that Tokyo is only ten hours from Williamstown, just north of Sydney, Australia. The first requirement in the East, then, is for co-ordination of allied defence over the whole of the Far East, i.e., North Pacific (Korea and Japan), Central Pacific (the Formosa and Hong Kong area) and South-East Asia (the sector from about Hanoi to Ceylon).

This whole Far Eastern area is the region that should be considered. Nothing later in this article is intended to suggest that co-ordination of strategy over a smaller area will be satisfactory. For certain purposes other than strategic planning, co-operation within smaller areas will be considered because it is at the moment easier to achieve and offers certain advantages to the countries concerned.

#### TERMINOLOGY

Co-ordination is the process by which the defence efforts of individual nations are adjusted so that they are complementary (i.e., mutually supporting) as opposed to being unrelated or duplicating. This limited objective can be achieved to a considerable extent by consultation, i.e., without the formation of an allied command. Where a large number of small nations are concerned, such a system leaves untouched the 'penny packet' armies, navies, and air forces of the independent members. In the Far East, allied geography has produced these 'penny packets' already and, in the air force sphere at least, mere co-ordination will not in itself eliminate the wastefulness inherent in them. Apart from this, co-ordination of military policy by consultation takes time; in an emergency agreement may not be achieved in the time available.

The term *integration* will be used to denote the amalgamation of individual national forces into a single combined force under the command of an international staff. This process (adopted to some extent in N.A.T.O.) simplifies the task of co-ordinating national plans because these plans are formulated by a single international group. It tends to produce automatically a total defence effort which is properly balanced when viewed collectively. The integrated force so produced is usually large enough to permit provision of all the necessary specialist elements and staffs on a scale that is economically and militarily viable.

Finally, wherever reference is made to 'British' defence efforts, this is intended to include the Australian and New Zealand contributions.

## SECTION II—THE BROAD REQUIREMENTS

TABLE 1  
PRINCIPAL FUNCTIONS REQUIRING CO-ORDINATION IN THE FAR EAST

Item No.	Function	Type of Organization probably required
1	Co-ordination of the <i>political</i> aspects of defence, e.g. (a) Provision of agreed political guidance to the military commanders. (b) Provision of agreed decisions on major questions of military policy. (c) Provision of agreed decisions on the broad level of defence effort. (d) Apportioning of the defence burden.	Council at Ministerial level, (assisted perhaps by committee of deputies) conferring at regular intervals.
2	Co-ordination of <i>military strategy</i> , e.g. (a) Provision of agreed military advice to the governments. (b) Provision of agreed strategic direction to the executive military commanders.	Some form of Combined Chiefs of Staff Committee (but this will be ineffective without 1 (a), 1 (b) and 1 (c)).
3	Co-ordination of the executive military <i>preparations</i> , e.g. (a) Agreement on intelligence and plans. (b) Provision of the necessary infrastructure (including communications) to permit international reinforcement. (c) Provision of necessary stockpiles to permit international reinforcement. (d) Co-ordination of tactics. (e) Co-ordination of training.	As at 2, but financing of the infrastructure and stockpile is likely to cause grave difficulties unless the machinery for Item 1 exists and is efficient.
4	Co-ordinated execution of military <i>operations</i> in an emergency and in war.	Command arrangements agreed in peace by Items 1 and 2 and backed by availability at short notice of the necessary communications and H.Q. facilities.
5	Development of a co-ordinated defence <i>production and distribution</i> organization, e.g. (a) Agreement on the extent to which Australia should be developed as the source of military supplies (e.g. aircraft) rather than as a source of fighting forces. (b) Standardization of military equipment wherever practicable. (c) Development of an agreed distribution system and transport routes (including air routes). (d) Co-ordination of plans for stockpiling strategic materials.	An international supply committee. This will require guidance from the Combined Chiefs of Staff (Item 2) and executive decisions by the machinery for Item 1.
6	Co-ordination of <i>economic and financial</i> aspects of defence, e.g. (a) Provision of agreed advice on costs. (b) Provision of agreed advice on apportionment of costs. (c) Concerted economic policies.	An international finance committee representing the treasuries. This will price the bills arising from Items 2, 3 and 4, and advise the political council (Item 1).
7	Monitoring and <i>progressing</i> of defence preparations and efficiency in F.E. (or S.E.A.) as a whole to ensure that agreed plans and policies are implemented and that the available resources produce the highest possible degree of defence preparedness.	A supranational military authority (e.g., a supreme commander) backed by the machinery at Items 1 and 2.

Table 1 shows the principal functions or elements of defence which require international co-ordination and/or integration if the defence effort as a whole is to

give really good value for money spent. The list may not be comprehensive; nor is it intended to suggest that attempts to co-ordinate defence activities on a more limited basis are without value. The table is near enough to the mark, however, to serve as a check list.

Two points should be noted in connection with this list. First is the dependence of certain items on others. As an example of this the co-ordination of strategy by military staffs (item 2) is not likely to be successful in the absence of machinery to provide agreed political guidance and inter-governmental decisions on a continuing and regular basis, i.e., without item 1. This is just another way of expressing the old cliché that "it is not possible to make military sense out of political nonsense". A flow of agreed inter-governmental decisions is necessary in peace to allow military preparations to proceed to that 'reasonable military posture' required in the cold war and to keep our organization at readiness in changing circumstances.

The second point regarding our list is the vital importance to the United Kingdom forces in the Far East of item 5, i.e., a co-ordinated policy on defence production and supply. The British Commonwealth or the United States do not possess in the Far East (or Australasia) any industrial base capable, as it stands, of supporting a war. Satisfactory air communications from the United Kingdom to the Far East will, in future, depend on the goodwill of certain Middle East and Colombo Pact countries who may not approve the operations which the United Kingdom has in view. The development of a satisfactory industrial base organization in the Pacific area (or the planning of a satisfactory alternative) is obviously an undertaking quite beyond the financial resources of any one nation on its own. International agreement on what action should be taken to provide (in war) the industrial backing for Commonwealth forces serving in the Far East is probably the most important *unresolved* question affecting British defences in South-East Asia. More is said on this later.

### SECTION III—THE MACHINERY THAT EXISTS NOW

#### GENERAL

Although the influence of S.E.A.C.D.T.O. may eventually extend along the full length of the 'bamboo curtain', this organization is at present restricted by its very name to South-East Asia. In fact, as far as can be ascertained from published documents, there is no international machinery for co-ordinating allied defence effort in the Far East as a whole. Certain organizations operate in *parts* of the area.

To co-ordinate allied military effort in the Japan/Korea zone, there is the United Nations Command in Tokyo. This receives some measure of international political guidance from a committee comprising those nations which participated in the Korean War. It seems reasonable to assume that this organization is no longer very active.

To co-ordinate defence effort in South-East Asia, there are the three organizations, A.N.Z.U.S.,<sup>6</sup> A.N.Z.A.M.,<sup>7</sup> and S.E.A.C.D.T.O. It is worth looking at these to see to what extent they contribute to the requirements listed in Table I (if only on the limited South-East Asia basis).

#### A.N.Z.U.S. AND A.N.Z.A.M.

The first two items on our list indicate what is necessary to produce an agreed allied strategy in the Far East. It is well known that substantial progress is not

<sup>6</sup> See Note 3. This organization is presumably not restricted to South-East Asia.

<sup>7</sup> Australia, New Zealand, and Malaya.

likely to be made in agreeing on this allied defence strategy without a forum where a joint British/American politico-military policy can be framed. From this point of view, A.N.Z.U.S. and A.N.Z.A.M. are rather like two chairs, each having one of its four legs missing. One can only hope that somehow there will soon be a solid four-legged table against which these three-legged chairs can lean.

The production of an agreed strategy is, however, not the only requirement on our list. Having noted the inadequacy of both A.N.Z.A.M. and A.N.Z.U.S. for this purpose, let us pass on to consider the machinery which they offer in relation to the other requirements on our list.

#### A.N.Z.U.S. (I.E., AUSTRALIA, NEW ZEALAND, AND U.S.A.)

A.N.Z.U.S. has a political committee and a military committee (items 1 and 2 of our table), but there the organization appears to end. Whether these committees have achieved anything to get better value for the money voted for defence in Washington, Canberra, and Wellington can be finally decided only by those with access to top secret files. However, the Press has noted the infrequency of military meetings, the lack of a permanent secretariat, and the absence of integrated military staffs. This evidence suggests that, although A.N.Z.U.S. provides a valuable political guarantee of help in war to Australia and New Zealand, it is of limited practical significance when it comes to the co-ordination and integration of defence measures *now*. There is widespread suspicion that the A.N.Z.U.S. military meetings to date have been in fact just so much scenery for the public. The announcement by Mr. Menzies of 20th April, 1955 (at Appendix A) tends to disclose, indirectly, how limited the co-operation has been in the past.

To sum up, A.N.Z.U.S. is a great comfort to every Australian and to every New Zealander, because it is a promise of assistance in war. It does not, however, appear to have helped these countries to any great extent in getting value for their peacetime defence expenditures.

#### A.N.Z.A.M. (I.E., AUSTRALIA, NEW ZEALAND, AND MALAYA)

A.N.Z.A.M. is a purely Commonwealth organization comprising Australia, New Zealand, and the U.K. Unlike A.N.Z.U.S., it is not (as far as is known) backed by a formal treaty. In August, 1914, and September, 1939, Australia and New Zealand both declared war on Germany within a few hours of the corresponding declaration at Westminster; where the ties are so close, formal treaties guaranteeing mutual assistance may well be dispensed with.

This lack of a formal treaty may be the reason for the apparent lack of definition as to what A.N.Z.A.M. purports to do, and exactly what machinery it uses. Mr. Menzies, in his statement at Canberra on 20th April, 1955, indicated that :—

- (a) the A.N.Z.A.M. Defence Committee was then drafting a directive for the A.N.Z.A.M. strategic reserve in Malaya. Directives for military commanders are normally issued by national Chiefs of Staff, and it is reasonable, therefore, to infer that the A.N.Z.A.M. Defence Committee comprises, or represents, the Chiefs of Staff of Australia, New Zealand, and the U.K. ;
- (b) there will in future be some Australian/New Zealand/U.K. staff integration in the Malayan Area Command, where the A.N.Z.A.M. strategic reserve will be located.



This evidence of military co-operation is a welcome sign. It looks as though A.N.Z.A.M. satisfies (or will shortly satisfy) requirements 2 and 4 on our check list. What of the others?

For co-ordinated political direction and inter-governmental decisions A.N.Z.A.M. appears to depend largely on the opportunities for discussion afforded by the occasional meetings of the Commonwealth Prime Ministers. It is difficult to imagine any reason for concealing the existence of an A.N.Z.A.M. Defence Council at ministerial level if, in fact, there were any such counterpart to the N.A.T.O. and A.N.Z.U.S. Councils. If, in fact, the three Defence and Foreign Ministers had been meeting regularly to discuss A.N.Z.A.M. defence, it would be difficult to conceal the fact. The obvious inference is that there is no such council. This is a weakness.

Beyond this, little is known of the A.N.Z.A.M. machinery—if in fact any exists beyond the military committee already referred to. Mr. Menzies's announcement implies that it is developing and in view of this, some suggestions are made in Section V. At present its shortcomings are most conspicuous in the sphere of defence production and supply (item 3) where the lack of a unified or co-ordinated policy for Malaya, Australia, and New Zealand is manifest to all ranks in Malaya. The accomplishments of a Chiefs of Staff Committee in welding together the effort of a base area (i.e., Australia-New Zealand) with that of an operational area (Malaya, etc.) is not likely to be startling unless there is in existence a parallel committee or individual with *executive* responsibility for integrating defence *supply* and distribution and for the associated industrial war planning. As far as is known, no such organization exists.

It appears (to the public at least) that A.N.Z.A.M.'s contribution to Commonwealth defence co-operation is limited to broad agreement on military strategy. Thus A.N.Z.A.M. meets requirement No. 2 (Table 1) but fails (to some extent at least) on all the other items. This will continue so long as its organization remains circumscribed.

#### S.E.A.C.D.T.O. (I.E., SOUTH-EAST ASIA COLLECTIVE DEFENCE TREATY ORGANIZATION)

A principal handicap to S.E.A.C.D.T.O. is, of course, its membership. No doubt the U.K. and U.S.A. originally hoped to bring in all five 'Colombo Powers'<sup>8</sup> and the Indo-China countries (Laos, Cambodia, and Vietnam) in addition to Siam and the Philippines. This would have given total membership of 15, i.e., 10 Asiatic and 5 'western' nations (Australia, France, New Zealand, United Kingdom, United States of America). Of the five Colombo Powers, only Pakistan became a member. The Geneva Treaty made it impossible for Vietnam to participate and made it indiscreet (if not impossible) for Laos or Cambodia to do so. This left the five western nations with only three Asiatic nations (Pakistan, Siam, and the Philippines). The result is an alliance which is neither comprehensive (even in South-East Asia) nor exclusive. Nevertheless, some co-operation is better than none—provided, of course, it is effectively pursued.

Under the Manila Treaty<sup>9</sup> it was agreed (Article 2) "the parties (i.e., of the S.E.A.C.D.T.O. organization) separately and jointly by means of continuous and effective self-help and mutual aid will maintain and develop their individual and

<sup>8</sup> Pakistan, Ceylon, Burma, India, and Indonesia.

<sup>9</sup> Vide Reuter's despatch from Manila on the last day of the Conference (10th September, 1954).



collective capacity to resist armed attack. . . . . " (Article 4). The Treaty organization was amplified in the communiqué issued at the close of the Bangkok Conference held in February, 1955, which shows that this includes :—

- (a) A council of the Foreign Ministers (or their designated representatives) meeting at least annually.
- (b) A group of military advisers meeting periodically and formulating " their own rules of procedure and any necessary organizational arrangements ".
- (c) Meetings of military staff planners.

The Treaty and the organization outlined above do specifically allow scope for development of the military organization. The possibilities are discussed in the next section.

To deal with an emergency now, the treaty includes the following provisions under Article 4.

" Each party recognizes that aggression by armed attack in the treaty area against any one of the parties, or against any state or territories which the parties by unanimous agreement may hereafter designate,<sup>10</sup> would endanger its own peace and safety and agrees that it will in that event act to meet the common danger in accordance with its constitutional processes . . . . . If in the opinion of any of the parties the integrity of the territory or the sovereignty or the political independence of any party in the treaty area . . . is threatened . . . the parties shall consult immediately in order to agree on the measures which should be taken for the common defence ".

If one scans the rest of the published provisions and official announcements, there appears to be no commitment to military assistance other than this. In these days, machinery for consultation is certainly important, but is scarcely an adequate substitute for visible allied military preparations including forces ready to launch, under a unified command, fully planned and agreed operations to meet specified contingencies.

#### SECTION IV—INCREASED CO-OPERATION WITH U.S.A. AND THE NON-COMMUNIST ASIATIC COUNTRIES

##### GENERAL

It will be apparent that, barring some undisclosed major developments within the S.E.A.C.D.T.O. framework, the existing machinery for the integration of Allied and British Commonwealth defence effort in the Far East falls far short of that which is desirable from the point of view of overall military efficiency. What then can be done or urged by the four Commonwealth countries<sup>11</sup> most concerned to improve this position ?

The practical possibilities can be conveniently discussed under three headings, viz. :—

- (a) Increased military co-operation between the western Powers and the Asiatic countries.
- (b) Increased co-operation between the Commonwealth and the U.S.A.
- (c) Increased co-ordination and integration within the Commonwealth countries themselves.

Of these (a) and (b) are discussed below. (c) is covered in Section V which follows.

<sup>10</sup> A protocol issued at the end of the Manila Conference unanimously designated Laos, Cambodia, and South Vietnam as covered under Article 4.

<sup>11</sup> U.K., Australia, New Zealand, and Malaya/Borneo.

## CO-OPERATION BETWEEN THE WEST AND THE ASIATIC COUNTRIES

London and Washington, by their joint sponsorship of S.E.A.C.D.T.O., have recently made a concerted effort as far as the South-East Asia portion of our area is concerned. The success which has attended their efforts is limited as is shown by the initial membership of S.E.A.C.D.T.O. Current political conditions do not, unfortunately, permit a fully comprehensive organization.

With regard to the military effectiveness of S.E.A.C.D.T.O., a determining factor will be the American policy within the Military Advisers' Group. Mr. John Foster Dulles has given us an indication of the principles on which the United States military adviser will work in this organization; in his national broadcast after his return from the Manila Conference on 15th September, 1954, he reported that :—

" We considered at Manila how to implement the Treaty. One possibility was to create a joint military force. However, I explained that the United States' responsibilities were so vast and so far-flung that we believed that we would serve best, not by earmarking forces for particular areas of the Far East, but by developing the deterrent of mobile striking power, plus strategically placed reserves. This viewpoint was accepted. Thus, the Treaty will not require us to make material changes in our military plans. These plans already call for our maintaining at all times powerful naval and air forces in the western Pacific capable of striking at any aggressor by means and at places of our choosing. The deterrent power we thus create can protect many as effectively as it protects one ".

Clearly the U.S. does not intend to allow any of her military forces to be incorporated in a S.E.A.C.D.T.O. joint force or joint reserve. Without U.S. participation, the establishment of integrated allied forces under S.E.A.C.D.T.O. is unlikely. The mobile deterrent force which Mr. Dulles mentioned would, of course, be more effective if it were larger, international in composition, and included ground forces.

It appears, therefore, in so far as it is concerned with hot war preparations, that the S.E.A.C.D.T.O. role will be to co-ordinate national strategies by consultation rather than to formulate detailed operational plans utilizing specific military forces. It will not integrate the various national defence resources allotted to the area into a single balanced economical force. Nor is there any published evidence as yet to suggest that it will direct provision of the infrastructure and stockpiles in the area so essential to that 'reasonable military posture' we require in the cold war. It is scarcely likely to address itself to the even more complicated problems of rationalizing as between the U.K., U.S.A., Australia, and Japan, the supply organization of the region as a whole.

Within the smaller South-East Asia area S.E.A.C.D.T.O. may, of course, help the anti-Communist régimes to stiffen their resistance in the cold war by building up :—

- (a) Efficient police and other internal security forces.
- (b) Economic stability.
- (c) Democratic ideology.
- (d) Confidence.

As the will to resist increases, so will the size and quality of the indigenous forces—helped, one hopes, by western Powers in their training and equipment.

There are also some other possible developments which could come from S.E.A.C.D.T.O., e.g., the establishment of a combined South-East Asia Defence

College located in the area to run a variety of courses tailored to the requirements of the region, covering, e.g., the problems of South-East Asian defence, inter-Service and inter-governmental co-operation, police and anti-subversive methods, and military roles in internal security. Such a college would help to unify and stiffen Asian military leaders. It could also give British and American officers on first arrival in the area an idea of the problems, some of the background, some useful Asiatic contacts, and an Asiatic viewpoint.

#### FACTORS AFFECTING AMERICAN POLICY ON CO-OPERATION

One often hears criticism of the American opposition to a higher degree of defence integration in the Pacific. It is, however, worth remembering that a large part of the Allied fighting forces now in the Far East is American; certainly most of the 'western' air and naval forces in the Far East are American; furthermore, the materiel for many of the Asiatic national forces is provided by the U.S.A. In these circumstances it is understandable why the Americans are not keen to incorporate their military strength in a joint force; this would inevitably be controlled by an international council in which the American view could be swamped by a group of Asiatic (or even Commonwealth) nations whose own military contributions in the area at the present time are, relatively speaking, quite small.<sup>12</sup>

A second factor influencing American policy is the desire to avoid an association with the so-called colonial powers. A five-power alliance comprising Australia, France, New Zealand, U.K., and U.S.A. would be criticized internally in the United States as support of colonialism and attacked in Asia itself as 'a White Man's Club'. The Philippines and Siam would resent their exclusion; the former might well refer to their treaty with the U.S.A.

Thirdly, the U.S.A. is not without its own internal organizational problems in the Pacific where there have been, and still are, two American military commands, viz. C-in-C. Pacific or CINCPAC with Headquarters at Honolulu and C-in-C. Far East or CINCFE with Headquarters at Tokyo. Some rationalization and integration of the American command organization in the Pacific may well be a prerequisite to effective international co-operation.

Fourthly, it would be idle to ignore the fact that there are some doubts in U.S.A. as to the risk of a security leakage. Although this risk should present no greater problem than some which arose within N.A.T.O., an improvement in security may be a prerequisite to a frank disclosure of detailed U.S. military plans.

For these and many other reasons the writer dismisses as unlikely in the short term the development of an integrated allied command in the Pacific (on the N.A.T.O. pattern). It would probably be optimistic to expect the Americans in their present mood to do much beyond aligning, by intermittent consultation, their Far East hot war policy outlined above with the strategy of the A.N.Z.A.M. and S.E.A.C.D.T.O. nations.

It seems possible that this military position as between U.S.A. and the Commonwealth will persist in some degree until :—

- (a) Anglo/American political views on the Far East are more closely aligned; and/or

<sup>12</sup> The British ground forces in Malaya are substantial, but are so committed internally as to be scarcely available for allied operations.

- (b) The British Commonwealth forces readily available for international operations in the East are on a scale well beyond the 'token force' dimension. From the U.S. point of view the size of the Commonwealth force must be sufficient to justify the effort required to achieve integration and, together with Commonwealth contributions in other forms,<sup>13</sup> must justify the fairly large voice which the Commonwealth would undoubtedly demand in the political direction of a campaign; and/or
- (c) The threat of imminent hostilities demands a more efficient allied organization.

As opposed to this pessimistic view there are some grounds for optimism in the agreed U.S./Australian statement made by the Australian Prime Minister on 20th April, 1955, in connection with U.S. co-operation in the defence of Malaya. This is reproduced at Appendix A. (This speech reveals indirectly just how limited strategic co-ordination has been in the past.)

## SECTION V—INCREASED CO-OPERATION WITHIN THE COMMONWEALTH

### GENERAL

The special interests of the British Commonwealth in the Far East lie in South-East Asia. The announcements by the Prime Ministers of New Zealand (Mr. Holland) and of Australia (Mr. Menzies) in March/April of 1955, regarding the deployment of their forces in Malaya, imply a genuine and logical interest in the security of Malaya in particular. And, for the moment, it seems easier (politically) to make progress within the Commonwealth and with regard to defence in this limited South-East Asia area rather than to unite the Far East as a whole. It is sound to support increased collaboration within this reduced zone, because the lesser can lead to the greater—just as the Brussels Treaty and Western Union paved the way for N.A.T.O.

We have already noted the A.N.Z.A.M. organization and the fact that its machinery appears to be confined to some sort of A.N.Z.A.M. Chiefs of Staff Committee. This high level military committee is a valuable start, and it is for consideration how this organization might be expanded to rectify its current limitations. Mention has already been made of the need for Commonwealth co-operation in the sphere of defence supply; this is potentially so important that I will enlarge on it here with particular reference to the defence of the Malayan area.

### SUPPLY OF AIRCRAFT AND ARMS

The outstanding example of the lack of unified or co-ordinated supply policy for Malaya, Australia, and New Zealand, is of course aircraft. The Australian aircraft industry is producing Sabre and Canberra aircraft for the R.A.A.F. at an extremely high cost; this is accepted because continuous supply from the U.K. or from the U.S. in war is regarded as unreliable; meanwhile, the R.N.Z.A.F. and the U.K. air element in Malaya continue to pin their faith on supplies from the selfsame U.K. factories. The Australian aircraft industry unsupported by aircraft orders from Malaya and New Zealand is scarcely economical. If the R.A.A.F. policy is really necessary, then the R.A.F. and R.N.Z.A.F. supply policies would appear to be questionable.

<sup>13</sup> e.g., territory of strategic importance.



How much reliance can be placed on U.K. supplies to the Far East in war? It depends of course on the circumstances. The refusal of Ceylon and India to join S.E.A.C.D.T.O. is an augury of what may happen in a limited conflict in the East or in a full scale war against China. Changes in our treaty with Iraq suggest complications in the Middle East. Air freighting of spares for any of the Services will become a difficult, slow, and extremely expensive undertaking if we are denied transit facilities through India, Ceylon, or parts of the Middle East. In a global war (or in the period of tension preceding it), the U.K. might not feel justified in parting with military supplies, even if military production and distribution were proceeding normally.

Apart from these considerations, there are unsatisfactory aspects which arise now. At the moment the Ministry of Supply in London is responsible for the design and production of aircraft for the Royal Air Force in Malaya, while the Royal Australian Air Force is, to some extent, being equipped with the products of Australian industry. As an outcome of this supply organization, we have had in Singapore recently two different kinds of Lincoln bombers, one a British made Lincoln and the other an Australian made one. Within the next 12 or 18 months we may expect to see both Australian and British Canberras, while, in an emergency, there could be a third version of the same aircraft appearing from the American Canberra factory. Even the first two varieties of Canberras require their own special range of spares as was demonstrated at Cocos Island in the New Zealand air race of 1953. The desirability and, in fact, the need for better co-ordination of supply arrangements generally and for an effective standardization agency is at once evident.

It is suggested that the British Commanders-in-Chief in the Far East should have some responsible single authority to whom they can refer their entire defence supply problem in the same way as the Chiefs of Staff in the U.K. take up these questions with the Controller of Supplies (Army) and the Controller of Supplies (Air) in the Ministry of Supply.<sup>14</sup> It will be obvious that these two Ministry of Supply officers in London are unable to discharge similar responsibilities to the A.N.Z.A.M. forces in this area.

A single A.N.Z.A.M. Defence Committee would appear inadequate for this broader task, unless it is supported and advised by the Ministry of Supply in London, the Department of Defence Production in Melbourne, the Ministry of Materials in London, the New Zealand Ministries, and so on, *working as a co-ordinated group*. Some sort of A.N.Z.A.M. Supply Committee or a Controller of Supplies (A.N.Z.A.M.) is surely necessary. Co-operation in the Long Range Weapons Organization (Woomera, etc.) may, perhaps, have laid the foundations for this.

#### A.N.Z.A.M. FINANCE PROBLEMS

To attain the 'reasonable defence posture' in Malaya (or any other portion of the A.N.Z.A.M. region) considerable expenditure will have to be met jointly in connection not only with the maintenance of this new Commonwealth strategic reserve (or garrison), but also in connection with the provision of infrastructure, stockpiles, and industrial war resources. It will scarcely be efficient to leave the approval and apportioning of these expenditures to complex inter-departmental negotiation involving two or more Government departments in London, Canberra, Melbourne, Singapore, and Wellington. Some kind of permanent A.N.Z.A.M. Finance Committee is obviously necessary to meet requirement 6 of Table 1.

<sup>14</sup> The naval supply problem is, perhaps, not so complicated.



## DETERMINATION OF THE AUSTRALIAN ROLE

While the need for co-ordinated supply arrangements and for machinery to agree cost sharing are obviously necessary, there is a broader problem. Under the new defence policy announced<sup>15</sup> by Mr. Menzies on 1st April, 1955, it looks as though the defence of the Malayan area will in future have first call on the entire defence potential of Australia. How should this effort be planned and used? Should Australia provide a base with factories producing military vehicles, aircraft, and other war supplies? Or should Australia endeavour to provide a large expeditionary force and rely on the U.K. or American industry for its fighting equipment? Or where between these two extremes does the right compromise lie? In fact, there is a need for an organization to decide these issues and plan a balanced total defence effort for the A.N.Z.A.M. area with due regard to:—

- (a) What equipment and forces might or might not be available for export from the U.K. (or U.S.A.).
- (b) The probable sea and air transport situation.
- (c) The requirement for a base in the theatre itself.
- (d) The industrial potential and limitations of Australia and New Zealand.

Major decisions on Commonwealth policy of this magnitude require consideration at ministerial level.

## SUGGESTED A.N.Z.A.M. MACHINERY

Wherever effective action depends on agreement by a number of Government departments in different countries, an indifferent or dilatory attitude on the part of any one of these departments can prevent any progress being made. It is, therefore, too dangerous to leave the problems mentioned above to be sorted out by complex inter-departmental negotiation without the safeguard provided by a high level monitoring or progress agency. The writer, therefore, suggests that in addition to any existing A.N.Z.A.M. Military Committee there is a need for some new associated organizations with clear cut *executive* responsibility for:—

- (a) Defence production, supply, and repair for Commonwealth forces in South-East Asia, with both planning and executive functions.
- (b) Resolving the complex questions of what the financial contributions of each of the three Commonwealth countries should be.
- (c) Providing decisions or approving recommendations on defence matters at Government level.

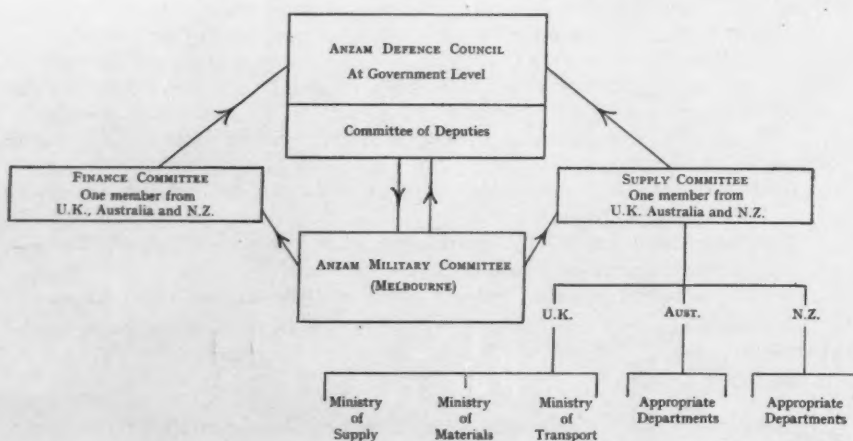
To sum up, consideration might well be given to the establishment of the following agencies to work in close association with the A.N.Z.A.M. Military Committee:—

- (a) An A.N.Z.A.M. Supply Board comprising representation at least from the Ministry of Materials (U.K.), Ministry of Supply (U.K.), the Admiralty, the Australian Department of Defence Production, and the corresponding New Zealand Ministries.
- (b) An A.N.Z.A.M. Finance Committee with representation from the Treasuries of all three countries.
- (c) An A.N.Z.A.M. Defence Council at Government level on the lines of the N.A.T.O. Defence Council. This Council might well delegate most of its work to a committee of deputies (cf. N.A.T.O.). This Council would also do much of its work through the Supply and Finance Committees mentioned above, and, of course, through the Military Committee already in existence.

<sup>15</sup> See Press reports, 2nd April, 1955, e.g., *Singapore Straits Times* of that date.

Diagram 2 illustrates the sort of organization which the writer has in mind.

DIAGRAM 2  
SUGGESTED ORGANIZATION FOR CO-ORDINATION OF ANZAM DEFENCES



#### POLITICAL DEVELOPMENTS IN MALAYA

Both the Colony of Singapore and the Federation of Malaya are moving rapidly towards self-government. In this connection there are reasonable grounds for believing that these two areas (which I shall refer to jointly as "Malaya") intend to remain within the British Commonwealth, e.g. :—

- (a) Up to date, the most successful political party in the Federation has been the U.M.N.O.—M.C.A. Alliance (Alliance of the United Malayan Organization and the Malayan Chinese Association). At its national convention at Kuala Lumpur in August, 1953, it pledged itself to work for "a sovereign and independent state *within the British Commonwealth*". The words in italics were specially emphasized by the Alliance chairman, Tengku Abdul Rahman, vide *Singapore Straits Times*, 24th August, 1953. (Since the above was written the Alliance Party has won 50 of the 51 seats in the first general election. Tengku Abdul Rahman is now Chief Minister of the Federation.)
- (b) In Singapore, five parties contested the April, 1955, elections. Of these five parties, only one (the People's Action Party) was virulently anti-British Commonwealth; this party won only three of the 25 seats. The new Chief Minister of Singapore, Mr. David Marshall, has publicly advocated retention of British defence forces in Malaya after the grant of self-government for a period of 15 years.<sup>16</sup>

These developments suggest that, although defence is one of the functions still retained by Her Majesty's Representatives in Malaya, there may be advantages in

<sup>16</sup> See "I believe," by David Marshall in the *Straits Times*, Sunday, 31st October, 1954.

associating at an early stage the new (1955) governments of Malaya with the political side of A.N.Z.A.M. Malayan military forces are already fully integrated with the British forces in the country, but Malayan leaders of all parties need immediate education on the defence problems affecting their country. If Malaya is threatened, the support of the 6,000,000 people living there will be essential to a successful defence; this same support is of course fundamental to the resolution of the present internal emergency. I shall, however, leave it to others to suggest just how the Malayan peoples (and the people of British Borneo) could best be fitted into an A.N.Z.A.M. Defence Council such as is suggested at Diagram 2.

#### POSSIBLE COMMONWEALTH FAR EAST GARRISON FORCE

Before concluding this section the writer suggests that the Commonwealth countries concerned might well consider the establishment of a fully integrated Commonwealth Far East Garrison Force, comprising personnel who will spend most of their military career in Malaya, Borneo, Australia, and possibly Hong Kong. Such a force might well include some Gurkhas, Straits Chinese, Dyaks, and Fijis, as well as contingents from the U.K., New Zealand, and Australia. This proposal is prompted by certain political factors in Malaya and Australasia. It is put forward tentatively and, as it is rather apart from the rest of this paper, discussion of it is relegated to Appendix B.

#### SECTION VI—CONCLUSIONS AND FINAL REMARKS

Defence on a national basis is as outmoded and inefficient as the control of customs or postal services on a parish or county basis. Despite this well-known principle, the machinery for defence co-operation between the non-Communist countries in the Far East is not very advanced. It tends to conceal beneath a façade of defence treaties, such as A.N.Z.U.S. and S.E.A.C.D.T.O., a real need for increased collaboration, without which we are not likely to achieve an impressive allied military posture (so essential in the cold war) or the best defence for the taxpayers' money.

The South-East Asia Collective Defence Treaty is the nearest approach to a comprehensive alliance, but it embraces only a small part of the area. There are clear indications in the speeches of the U.S. Secretary of State that the military machinery provided by this pact will be largely consultative. There will be no integrated S.E.A.C.D.T.O. forces or peacetime S.E.A.C.D.T.O. command on the N.A.T.O. pattern—unless of course the decisions taken at the initial Manila Conference (September, 1954) and announced by Mr. Dulles<sup>17</sup> are reversed.

A comprehensive Far East or Pan-Pacific pact on the N.A.T.O. pattern with full Asiatic participation does not appear to be on the horizon. In view of this, it is particularly important to ensure full British/American co-operation in the Far East. The term British is used advisedly to imply Australian and New Zealand as well as United Kingdom participation. The establishment of machinery for co-operation between these four powers is of vital importance; this could in due course provide the hard core of a Pan-Pacific non-Communist bloc. A number of political factors may make it difficult to achieve this at present, but it should be remembered that problems such as Formosa did not prevent Anglo/American co-operation in Korea; they should not preclude defence collaboration now.

<sup>17</sup> U.S. National broadcast by Mr. John Foster Dulles on his return from Manila Conference on 15th September, 1954.

Among the steps which the three Commonwealth countries might take to enhance the possibility of U.S. co-operation is the one advocated by Mr. Eric Harrison (then Australian Minister of Defence) on 19th April, 1950. To quote Mr. Harrison,<sup>18</sup> "Commonwealth countries would first have to show their interest in a Pacific Pact. Only after they had shown themselves ready to help themselves would the United States consider coming into a Pacific Pact". The effort involved in negotiating a Pacific Pact and establishing an integrated Command is considerable. To make this worth while to the U.S. in peacetime, the Commonwealth military contribution must include forces readily available for operations on a scale to justify the machinery, i.e., well beyond the token force dimension. Until the Americans feel that our contribution is of the necessary order, co-operation with the U.S.A. is not likely to extend beyond co-ordination of strategy by intermittent or *ad hoc* consultations. This has the serious limitations noted in Section I and at the end of Section III.

The statement made by the Australian Prime Minister on 20th April, 1955 (extract at Appendix A) gives hope for an increased Commonwealth/U.S. co-operation in the future. It also reveals indirectly how little collaboration there has been with the U.S.A. in the past on such important questions as the defence of Malaya.

Within the Commonwealth circle itself there is scope and reason for much greater co-ordination and integration. An A.N.Z.A.M. organization expanded to include appropriate representation of Malaya/Singapore/Borneo (as these countries achieve self-government) could provide a sizeable and formidable defence organization which would act as a stabilizing influence in South-East Asia. Formation of this would simplify co-ordination of Commonwealth policy with the U.S.A. in the interim and help to ensure that the Commonwealth had an effective voice in any ultimate Allied organization. But perhaps the most important immediate role of the A.N.Z.A.M. powers is to ensure an agreed Commonwealth policy for defence supply of Commonwealth forces in the Far East. These important tasks seem to be in some respects beyond the capacity of the present A.N.Z.A.M. Defence Committee (in so far as its details are known).

This article proffers specific short-term suggestions for enlarged A.N.Z.A.M. machinery, the establishment of a S.E.A.C.D.T.O. Defence College, and the formation of a Commonwealth Far East Garrison Force. It also includes at Table 1 a list which may be useful in checking the efficacy of any international military machinery which is evolved or suggested.

Finally, it is important to note that most of the countries in the area are to some extent politically immature. In such countries defence policy and senior military appointments can become, and often do become, the plaything of local politics and sectional interests. The existence of an International Defence Council and a Supreme Allied Commander may be expensive, but an integrated allied defence organization should be our ultimate objective.

#### APPENDIX A

STATEMENT BY THE AUSTRALIAN PRIME MINISTER, MR. R. G. MENZIES, IN  
THE HOUSE OF REPRESENTATIVES, CANBERRA, WEDNESDAY,  
20TH APRIL, 1955

"It was proposed that I should have, on the authority of the President and Secretary Dulles, an agreed statement which I could make to my own Parliament and people. Here is the statement:—

<sup>18</sup> R.U.S.I. JOURNAL, May, 1950, p. 30.



'During my visit to Washington I had valuable conversations with the President of the United States and other members of the American Government about our undertakings under the Manila Pact for the collective defence of South-East Asia, and, in particular, on the defence of Malaya, to which Australia attaches the highest possible significance.

'Our discussions made it abundantly clear that in the general task of preventing further Communist aggression, the United States considered the defence of South-East Asia, of which Malaya is an integral part, to be of very great importance.

'It is to be expected that the military arrangements put in train at the recent Bangkok meeting will provide all of the Manila Pact member Governments with more specific information with regard to the best means for each country to contribute towards the defence of this area. I raised the question whether in the event of Great Britain, Australia, and New Zealand undertaking to station substantial forces in Malaya, we could be assured that the United States would be prepared to give us effective co-operation.'

I interrupt the reading of this agreed statement to point out that the United Kingdom has already for years maintained substantial forces in Malaya, and has borne the brunt of resistance to Communist insurrection. I now resume the statement :—

'I was informed that though the tactical employment of forces was a matter which would have to be worked out in detail on the Services level, the United States considered that such effective co-operation was implicit in the Manila Pact.

'I enquired further whether, because of the deficiencies in military equipment which have inevitably arisen from the very great pressure which exists upon our own resources of money, men, and materials, we might hope to be able to look to the United States for military supply on some basis to be arranged.

'I was assured that, having regard to what the Americans knew so well about Australia's attitude and fighting capacity, they would be happy to take this matter up with our officials upon the basis of an accurate assessment of our deficiencies and a consideration of the ways and means by which the equipment position may be improved.

'In brief, I feel assured of complete co-operation between our two nations in the defence of our common security and in resistance to any further acts of Communist aggression.'

That, I repeat, is a statement which has the precise authority and support of the United States of America."

## APPENDIX B

### SUGGESTED ORGANIZATION AND CONTROL OF BRITISH COMMONWEALTH FORCES IN MALAYA AFTER SELF-GOVERNMENT

For reasons given in the main paper, it is reasonable to hope and believe that when Singapore and the Federation of Malaya achieve full self-government, they will remain within the British Commonwealth. It also appears that this development may not be too far ahead. When this stage is reached two defence problems arise in Malaya, viz. :—

- (a) What will be the status of the U.K., Australian, and New Zealand military forces now based in Malaya as part of the Commonwealth Strategic Reserve ?



- (b) How will the internal security threat in Malaya be dealt with in view of the obvious inability of the locally raised Malayan forces to cope on their own with armed revolt on the 1949-50 scale? If Imperial forces are employed to assist, under whose control would they operate?

Partly to minimize these problems, the writer suggests the formation of a fully integrated Commonwealth Far East Garrison Force deployed mainly in Malaya/Borneo and Australia. The force would include not only the indigenous forces of independent Malaya, but also elements from the U.K., Australia, and New Zealand. It might also include a detachment of Gurkhas, some Dyaks from Borneo, some Fijians, and perhaps even some representatives from New Guinea. The inclusion of contingents from former colonial territories<sup>19</sup> is particularly important because these countries are considered in Malaya to be fellow nations recently freed from 'the bonds of colonialism'; they are considered even by Mr. Nehru to be an integral part of South-East Asia. As such their representatives can achieve in certain parts of Asia a degree of confidence not so quickly accorded to advisers from the United Kingdom.

Control of the force would be vested in a Commonwealth Far East Defence Council comprising representatives at Government level from the U.K., Australia, New Zealand, and Malaya/Borneo.<sup>20</sup> Below this there would be an integrated military command. This would have the advantage of establishing in peacetime the integrated machinery for Commonwealth political direction and Commonwealth command which would be required in war.

From the point of view of Malayan security the existence of this fairly large unified force in or near Malaya would provide a stabilizing influence and enhance confidence in the whole area. Malaya and Borneo would be able to develop in their own way without fear of external aggression or intimidation. The Malayan element of the force would undoubtedly be maintained at a higher standard of training than is otherwise likely. Integration with Europeans would minimize the risk of internal subversion by Communists among the Malays and Straits Chinese. The force as a whole would probably be eligible for Mutual Defence Aid from the U.S.; at the very least the older Commonwealth countries would almost certainly help the Malayan contingent in the supply of materiel.

Organization and control of the military forces in the way suggested would minimize the political problems associated with the use of outside military forces in the solution of internal security problems. Furthermore, by providing a non-Malay and non-Chinese element in the armed forces, any problems in connection with racial predominance in the forces or racial discrimination in internal security operations would be avoided.

U.K. participation in the force should preferably be on the basis of permanent transfer of the individual to the Far Eastern theatre. This raises problems, but is after all not so different from the old Indian Army formula. It should be recognized that there is in Malaya considerable political opposition to any increase in the scale of what are called 'U.K. expatriates'. This opposition does not apply to any European who becomes permanently resident in the Malayan area, because it is felt that he then has a permanent stake in the security of the Far East. If, therefore, a

<sup>19</sup> i.e., Australia and New Zealand.

<sup>20</sup> Self-government for Borneo may not come until later, but this should not prejudice participation by the present authorities.

proportion of the U.K. forces voluntarily transferred to an integrated Far East Garrison Force and settled in Malaya or Australia, a big step would be taken to overcome this unfortunate prejudice and the associated lack of confidence in the determination of the U.K. forces to fight vigorously for Malaya. The presence of these men in Malaya or Australia after their retirement would ensure the availability in the area of an acclimatized immediate reserve of European troops with a consequent saving in shipping or air transport in an emergency. While permanent transfer of U.K. personnel to the Far East Garrison Force is not fundamental to the suggestion made above, it might well facilitate political agreement to force integration.

It is not, of course, necessary that all U.K. forces at present in Malaya should become part of the permanent Far East Garrison. The training advantages of rotating military forces in different theatres are considerable. This principle should not be abandoned. Some compromise with it, however, seems necessary to meet our future problems in South-East Asia. The Commonwealth Far East Garrison need comprise only those forces which are in any event likely to stay on in the area. This garrison would be reinforced from time to time from the global strategic reserve.

Training establishments for the Far East garrison forces should be provided as far as possible outside Malaya so as to ensure climatic change for the European members of the force. Logically these establishments would be in Australia, but some might be at Malayan hill stations. If it were politically acceptable, the Hong Kong garrison should be included in the organization, thus facilitating rotation of personnel to different climatic regions.

The proposals made above may require considerable modification, but it would appear difficult to provide for the internal security threat in Malaya after independence without some arrangement on the lines suggested above.

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*Note:* This article was written in May, 1955, and may be subject to modifications in the area which have taken place since that date.—AUTHOR.

## POLICY, GRAND STRATEGY, AND PRINCIPLES

By "MUSKETEER"

*"The value of raking up past errors is to profit by experience in order to avoid repetition in the future."*—ADMIRAL W. H. D. BOYLE

"**W**HEREAS but a generation or two ago war was accepted as an instrument of policy," writes General Fuller, "it has now become policy itself. To-day we live in a state of 'wardom'—a condition which dominates all other human activities." He considers that no man can say how this state of affairs will end, but that one thing is certain, "and it is that the more we study war, the more we shall be able to understand war itself."<sup>1</sup>

There is a danger that officers of the three Services may become too involved in technical matters and the problems of their own Service or arm at a time when they require a broader outlook than ever before. The object of this paper is to arouse interest among the rising generation of officers in what may be called the higher study of war. Furthermore, it is desired to emphasize that the armed forces of the Crown have to be regarded as a team whose members have their own roles, but are accustomed to think in terms of combined effort. We cannot again tolerate independent doctrines or private wars run by any one Service.

The primary policy of any nation must be to ensure its own security. To this end we have for centuries endeavoured to maintain the balance of power in Europe, if necessary by war. We are a maritime nation and, owing to our geographical position and the wide dispersion of our resources, are still dependent on the sea and ships. The security of our sea communications is vital.

In the first decades of the XIXth Century we conducted a long and successful war and when the time came knew how to conclude a stable peace. After 1815 came the long 'dead period' during which military thought in this Country reached its lowest ebb. The weaknesses disclosed by the Crimean War came as a severe jolt to the Nation, but the effect was not lasting. The Boer War once more showed our unreadiness for a major war, though this time reorganization and improvements in training followed, while the study of war received more attention. All this bore fruit in 1914. But after 1918, the complaint, "We won the war and lost the peace," was bandied about. Though officially frowned on and attributed to either the ignorant, the disgruntled, or the merely facetious, there was a basis of truth in it.

### OBJECT AND MEANS

Aristotle, tutor to Alexander the Great, is credited with the aphorism: "The ultimate object of war is a stable peace." This object is, of course, the political one. If the aim of war be peace, then the military object is to achieve it as economically as possible by operations culminating in the destruction of the enemy's power or will to continue the struggle. As we know to our cost, it is not economical to devastate an enemy's country and then have to assist in its rehabilitation.

In this connection it is worth while to compare the settlement after 1918 with that of 1815. The policy of the British Government was to ensure a lasting peace by re-establishing the balance of power. Wellington achieved this political object not only by winning the last battle of the war but by his wise and firm conduct at the

<sup>1</sup> *The Decisive Battles of the Western World*, Vol. I, 1954.

peace conference. The same cannot be said for the makers of the Treaty of Versailles, and it was soon abundantly clear that the Entente had not succeeded in making a stable peace.

Writers on war invariably stress the fact that policy and strategy must go 'hand in hand', which is true, but policy must be conditioned by the means available. It should be obvious that to initiate or maintain a policy without the means to enforce it at the right time and place is stupid or worse. For instance, we started the last war with a one-hemisphere navy for a two-hemisphere commitment—and lost Singapore. On the other hand, it is folly to adopt a weak or neutral policy to avoid having to provide the means. It follows that the policy makers must also provide the right means and in time; if not, they are guilty of jeopardizing the security which it is their duty to ensure.

#### STRATEGY

Colonel G. F. R. Henderson, who did so much in the last decades of the XIXth Century to introduce the study of war to British officers and to emphasize the importance of strategy, remarked that strategy and tactics in his day were often confused with one another. Judging from the Press, this confusion exists to-day and, moreover, strategy is often confused with *stratagem*, which is an artifice. The Oxford Dictionary gives one definition of strategy as: "the art of so moving or disposing troops or ships as to impose upon the enemy the place and time and conditions for fighting preferred by oneself." Clausewitz defined strategy as "the employment of the battle as the means towards the attainment of the object of the war."<sup>2</sup> Henderson chose the definition of strategy as: "the art of bringing the enemy to battle," while, he added, "tactics are the methods by which a commander seeks to overcome his opponent when battle is joined."<sup>3</sup>

It is sometimes asserted that strategy is a matter of common sense, but it is as often overlooked that trained minds and strong characters are required to execute it. The basic knowledge is acquired by the objective study of military history; its value is increased by experience of war. In the study and application of strategy due regard must be paid to the human element and all those factors which go to make up the 'atmosphere of war'. "The struggle between the spiritual and moral forces on both sides is the centre of all."<sup>4</sup> An example of one aspect of this is General Lee's strategy in the American Civil War when he played on the fears of Lincoln for the safety of Washington in two, if not three, campaigns and secured much advantage thereby. Historians may, at some future date, prove that the downfall of France in 1940 was largely due to the German exploitation of French political demoralization and loss of the will to resist.

Of equal importance are questions of topography, movement, and maintenance—the mechanism of war. These vital factors are apt to be overlooked by, or unknown to, armchair strategists and politicians who are, in consequence, not capable of judging what is or is not practicable. Relations between Lloyd-George and the General Staff in the 1914-18 War became strained as a result of their having to point out that his pet schemes were impossible to execute, even when strategically desirable.

<sup>2</sup> *On War*, von Clausewitz.

<sup>3</sup> *The Science of War*, Henderson.

<sup>4</sup> *On War*, von Clausewitz.



It is not always clear where strategy ends and tactics begin; the following will serve as an illustration. The withdrawal of two battle-cruisers and other craft from the Grand Fleet after the defeat of Admiral Cradock off Coronel in the Autumn of 1914, and their concentration at the Falkland Islands was strategy. Their employment by Admiral Sturdee in the subsequent action off those islands, in which he destroyed von Spee's squadron, was tactics.

National strategy is largely conditioned by geography. German strategy has hitherto had to deal with war on two fronts—east and west. France has for generations thought in terms of the defence of her eastern frontier. The existing policy of Russia does not differ widely from the traditional aims of the Czars. What has become known as *British Strategy* pivoted on our geographical position and so invariably involved combined operations by the Navy and Army. Its basis was the freedom of action conferred by command of the sea. The object was usually the protection or enhancement of our maritime power; sometimes it had commercial or economic aims as well. Secondly, our naval and military forces were employed to intervene in continental wars to assist in the maintenance of the balance of power. The Peninsular War is an outstanding example of this.

After the *Entente Cordiale* of 1904, we became involved in a land war of masses as an appendage to the French Army whose higher command had no comprehension of the importance of sea power. Continental strategists like Moltke and Foch thought only in terms of land warfare, whereas our traditional strategy was a near approach to 'grand strategy' to which reference will be made later.

#### HIGHER STUDY OF WAR AFTER 1918

Thanks largely to Henderson's teaching at the Staff College in 1892-1899, and to the labours of the Imperial Defence Committee, we were better prepared for a major conflict on land in 1914 than in 1899, and our victories are examples of the successful application of the principles of war. There were, however, faults in the general conduct of the war and relations between soldiers and statesmen were not always good. Moreover, both the India and Colonial Offices conducted independent wars of their own in the early years of the struggle. Startling developments in weapons and material took place; a third Service was added to our armed forces.

The new conditions were not overlooked by professional officers in the years after 1918. Their minds were not atrophied by the years of frustration, appeasement, and peace propaganda that followed. Though not another 'dead period' in this respect, it was a time when false prophets and enthusiasts flourished who, taking advantage of public dread of a repetition of heavy casualties, boosted some particular arm or weapon as a war-winner.

General Maurice stated in his study of the application of the principles of war, "It is evident that we should not think of strategy as concerning armies alone, nor of naval and air strategy as apart from, or unconnected with, military strategy. We require a broader definition of strategy than that normally given." He did not, however, suggest one. At the end of the book his advice to British officers is to "think of war not in terms of naval, military, and air power separately, but in terms of national power."<sup>5</sup>

<sup>5</sup> *British Strategy*, Major-General Sir F. Maurice (1929).



The author of an article published in 1930 argued that the aspects of the conduct of war may be divided into :—

- (a) War Policy : the function of the statesman.
- (b) Grand Strategy : the sphere of the chiefs of the combatant services.
- (c) Strategy : the province of the various commanders-in-chief.

He qualified (b) to the extent that the statesman as representing the national government must be supreme in some aspects of grand strategy.<sup>6</sup>

Lecturing at the Institution in January, 1931, Admiral Boyle reminded his listeners that, "The goal of war is peace and the higher study of war should certainly include consideration as to how to use victory when it has been achieved." He further emphasized the fact that we must study the social and economic causes of war as well as how to conclude it.<sup>7</sup>

In 1935, a new edition of *Field Service Regulations* appeared, including an additional volume *Operations—Higher Formations*, which proved to be as great a step forward as *Combined Training*. The latter, written by Henderson and first published in 1903, was our earliest attempt to set down the principles governing the employment of all arms in combination. *Higher Formations* stresses the combination of the three Services to achieve the national aim or object. It also defines and briefly discusses what the General Staff considered to be the principles of war, namely, maintenance of the aim, concentration, co-operation, economy of force, security, offensive action, surprise, and mobility. These principles stood the test of the last war.

This volume contained the following new definition :—

"Grand Strategy is the art of applying the whole of the national power in the most effective way towards attaining the national aim. It thus includes the use of diplomacy, economic pressure, the conclusion of suitable arrangements with allies, the mobilization of national industry and the distribution of the man power available as well as the employment of the three fighting Services in combination."

Elsewhere in the first chapter co-operation between the Services is enjoined and the ultimate national aim is stated as "to force the enemy to abandon the purpose for which he resorted to arms and to conclude peace on satisfactory terms." To accomplish the national aim, "the navy, army, and air force will act in combination to break down the enemy's resistance."<sup>8</sup>

#### APPLICATION : 1939-1945

It has been shown that the conduct of modern war was studied in the 'years between' but there is a difference between knowing and doing. We had, it is true, travelled a long way since 1899, and even 1914, in organizing the Country for war. The Chiefs of Staff Committee, which had come into being before the outbreak of the conflict, worked admirably. The Government, however, had not provided the means and an incredible strain was thrown on the Services in consequence.

The Allies made mistakes but, fortunately, not so many as the Axis powers. Although victorious, the western Allies did not succeed in concluding peace on satis-

<sup>6</sup> *The Conduct of Modern War*, Lt.-Colonel de Wattville, R.U.S.I. JOURNAL, February, 1930.

<sup>7</sup> *The Higher Study of War*, R.U.S.I. JOURNAL, May, 1931.

<sup>8</sup> *Field Service Regulations*, Volume III, 1935, Sections 1 and 2. The italics are the present writer's.

factory terms. They failed to re-establish the balance of power in Europe—the political object for which we went to war, and which we are still struggling to attain. Never have the difficulties of a coalition war been more apparent.

We again undertook 'side-shows' for political reasons of little or no value in connection with the achievement of the ultimate object. Moreover, we had not the means for such adventures without unduly weakening the main effort. The operations in Greece and Somaliland are fair examples of such excursions. On the other hand, the detachments made to secure Baghdad in 1941, and Madagascar in 1942, were in pursuit of subsidiary military objects affecting the conduct of the war.

In the sphere of grand strategy, there were two brilliant conceptions. First, the reinforcement of the Middle East forces in 1940; and secondly, the invasion of North-West Africa and subsequent junction in Tunisia with the 8th Army moving west from Egypt. Both were based on sea power. The second led to the complete destruction of the Axis forces in Africa and the reopening of the Mediterranean route.

We did not succeed in employing the three Services in combination until late in the struggle. This time it was the Air Ministry who ran a more or less independent war, the object of which was to end the conflict by bombing alone.<sup>9</sup> Neither did we succeed, at least in the early stages, in securing proper air co-operation in land operations where the Air Force indulged in 'strategic bombing' which had no relation to the existing situation. This was specially noticeable in France during May-June, 1940, and during the short campaign in Greece where, for instance, Sofia railway station, 100 miles behind the front, was bombed while the mechanized German formations streamed unmolested down the few roads.

#### WAR POLICY AND GRAND STRATEGY: 1939-1945

Policy and grand strategy are interlocked; both must be guided by the main principles of war and such others as affect the task in hand. It is suggested that the *aim* and *concentration* are of primary importance at this level, due regard being paid to the *security* of our main base and sea communications. The other five are either corollaries or come into play at some phase in the war, such as *offensive action* and *surprise*. The principle of the *aim* is applicable at all levels; it may concern the national war policy itself or some object calculated to further its attainment. Either has to be within the means available; *concentration* has to be applied to accomplish it.

Our national aim remained steadfast, though we faltered at times as to the methods of gaining it. Throughout the war Stalin kept firmly in view his post-war object which covered designs of long standing. The western Allies as such seem to have had no post-war object. The American General Staff believed they should be free to determine their strategy on military grounds alone—any object after victory was suspect as some form of European 'imperialism' or 'colonialism'. In 1945, the United States Government appears to have held the same views. Neither body appears to have understood that the goal of war is a good peace settlement, not just victory; and that when success is in sight the final moves should be in conformity with the political object. There was no favourable reaction to the Prime Minister's efforts to show that the ultimate object was the balance of power in Europe and that political considerations should be given due weight as the close of fighting drew near with victory assured. In a war waged by a coalition, understanding of the mentality

<sup>9</sup> This was discussed in *Air Power: Concentration and Co-operation*, R.U.S.I. JOURNAL, May, 1953.

of one's allies and their points of view is just as necessary as knowledge of the enemy's characteristics.

The Allies did not correctly appreciate the determination of the German people and the influence wielded over them by Hitler and his system. The verdict of history may be that three mistakes led to the prolongation of the war and indirectly to the situation which bedevils us to-day. They were :

(a) The announcement in 1943 that nothing but unconditional surrender would be accepted.

(b) The publication of the Morgenthau Plan in the Autumn of 1944 : Germany to be partitioned, deprived of her industrial potential, and forced to exist on agriculture.

(c) Indiscriminate bombing of German cities.

It is essential in conducting a war to be able to balance political with military considerations and decide which shall have priority. We, of all nations, should bear in mind the Duke of Wellington's dictum, " The only mode by which we can be successful is by the application of our means to one object." The political campaign in Greece is put forward as an example of the truth of these statements.

Like the expedition to Norway, the Greek adventure was foredoomed to failure. The force sent was too late, too small, lacking in modern weapons and equipment, and had insufficient air support. Moreover, there was a chronic shortage of ships at the time, port facilities were negligible, the lines of communication by sea were vulnerable, and land communications in Greece were inadequate. Even if justifiable from the political point of view, which is doubtful, the despatch of such an expedition involving the withdrawal of troops and air forces from the Western Desert was a blatant contravention of the principles of concentration and maintenance of the aim. The Middle East was vital to the successful outcome of the war, the immediate military object being to prevent the enemy reaching the land bridge between Africa and Asia or the entrance to the Red Sea. Nothing appears to have been achieved, though it was later claimed, but not substantiated, that the expedition delayed the German attack on Russia. In any case the operation was not mounted with this object in view and such effect, if it had happened, could only have been fortuitous. There were disastrous repercussions. We nearly lost Egypt and Malta ; casualties were heavy ; much equipment, including some 8,000 vehicles, was left behind. To make matters worse, irreplaceable naval personnel and craft were lost.

#### PUBLIC OPINION, SIMPLICITY, AND TIME

Clausewitz rated the gaining of public opinion as a principle of war. Strangely enough the Germans violated his 'principle' in 1914-1918. Their strategy on the eastern front, though perfectly sound from the purely military point of view, allowed Russian penetration into East Prussia in August, 1914. This incensed German opinion to such an extent that formations had to be withdrawn from the western front at the wrong time. Furthermore, world opinion was roused to hostility by the invasion of Belgium and by the submarine campaign. For well-known reasons world opinion was against Germany in 1939-1945. In contemporary conditions this 'principle' assumes considerable importance, especially in regard to public opinion at home and in our overseas territories.

It has been suggested that 'simplicity' should be elevated to the dignity of a principle as it is, indeed, of major importance in the conduct of war at all levels. The old saying, " Everything in war is simple, but the simplest thing is difficult " is well known and very apposite, hence the maxim that simple plans either in the sphere

of strategy or tactics have the best chance of success. Furthermore, simplicity in all administrative matters is a goal which surely could be attained, especially by curbing the existing excessive centralization with its complicated instructions and the resulting mass of paper work which clogs the chain of command and other channels.

Not to lose time is sometimes claimed as a 'principle'. It is a maxim of everyday life, and 'time' as a factor is invariably considered in appreciations of the situation. This should suffice. Finally, there is a quality—almost a principle—which should be insisted upon among politicians and officers of the western Allies in these dangerous times; it is *reticence*.

#### CONCLUSION

It has been seen that the goal of war is peace, but with the advent of nuclear weapons, especially the hydrogen bomb, it is feared that a major war would lead to the virtual destruction of the contestants and their homelands. It thus appears that these weapons would not attain the ultimate object, or at least cause the conclusion of peace on satisfactory terms to be a problem of overwhelming difficulty and complexity. However, the policy of the western nations is to rely on nuclear weapons as the 'great deterrent' to a major war. We have to be prepared, nevertheless, for the risk of this deterrent failing to deter, or that some means of neutralization will be found. It is of interest to recall that the Germans did not use gas against us in the last war, not for ethical reasons, but because they knew we were well protected and capable of most effective retaliation. In the meantime, there remains the possibility of limited wars and subversion, both of which tend to increase our commitments in Imperial defence and policing.

We should beware of exaggerated claims; such claims in the past have led to fallacious doctrines which still linger in certain quarters, or did so recently. It may be recalled that in the years between the wars the view was advanced that the development of the air arm "had rendered obsolete the old and hitherto accepted principles of war."<sup>10</sup> Again, it was prophesied about the same time that we could be defeated in 48 hours by a fleet of aircraft dropping mustard gas bombs on London.<sup>11</sup>

No new weapon, however revolutionary, has changed the basic principles of war, but new weapons have led to the modification of methods, organization, and composition of armed forces. The principles remain as guides; some may have to be given more weight, *mobility*, for instance, to attain rapid concentration from dispersion and vice versa.

Our defence problem is still unlike that of any other power. As in the past we are concerned with the application of old principles to new problems. So we have to study the use of nuclear weapons, how to develop the maximum force from our resources, and how to apply this force at the right time and place. As a nation we must try to ensure the utmost concentration of force on the objectives vital to our security and general conduct of a war. Furthermore, we must employ the three Services in close co-operation with energy and singleness of purpose in pursuit of the national aim. No one Service can be the 'first line of defence'. It follows that the three Services must have a common doctrine on the principles and practice of grand strategy.

The study of war provides inspiration in dealing with new problems; the 'raking up of past errors' helps in this respect. But, above all, let us maintain a sense of proportion and avoid slogans or catchwords.

<sup>10</sup> Quoted by Admiral Richmond in *Statesmen and Sea Power*.

<sup>11</sup> *Air Power and Its Application*, R.U.S.I. JOURNAL, May, 1928.



## THE MARINERS OF ENGLAND—II

By MAJOR REGINALD HARGREAVES, M.C.

"No man will be a sailor who has contrivance enough to get himself into a jail; for being in a ship is being in a jail, with the chance of being drowned."—DR. SAMUEL JOHNSON.

IT was King Charles II who bestowed upon his fighting marine the title of Royal Navy—possibly because its appellation was about the only thing with which he was in a position to endow it. Self-pledged to pay off his father's debts in addition to the very heavy personal liabilities of Oliver Cromwell, on his arrival in England he had discovered the Exchequer to contain the noble sum of £11 2s. 10d. Furthermore, of the Parliamentary grant of £1,200,000 to meet all the expenses for which the Monarch remained responsible, Charles received no more than £70,000. He was, therefore, scarcely in a position to do much towards wiping off the Navy debt of a million and a quarter left unsettled by the Protectorate.<sup>1</sup>

With a governing body that included James, Duke of York, and Samuel Pepys, efficient administration would have been assured had it not been for the fact that every measure designed for the improvement of the Service was hopelessly crippled by the chronic shortage of money. Inheriting a debt of half a million for wages alone, the Navy Board was never in a position either to clear off arrears or meet its current obligations with regard to pay with anything like punctuality.

In some measure to satisfy the seamen's just demands for payment, resort was made to the pernicious expedient of issuing 'tickets' for the wages due. The original idea behind the introduction of these 'tickets' was to save the necessity of transporting large sums of money on board ship, but, as Tanner so justly emphasises, "want of funds in the Navy soon made it the regular practice to treat tickets as inconvertible paper, and to discharge all seamen with tickets instead of money—or with money for part of their time and a ticket for the rest."<sup>2</sup> In theory, a ticket should have been good for its face value. But if, as so often happened, the Navy Office was unable immediately to redeem the docket, its owner was forced to try and encash it at a ruinous discount. Veritable harpies of women brokers hung about the Navy Office precincts ready to escort the seaman with a ticket for ready money to the lair of the gradgrind Mrs. Salesbury in Carpenter's Yard, near Aldgate. There the thing could be negotiated at a discount that was never less than 5s. in the pound and frequently at an even stiffer figure. Naturally enough, the sailor objected strongly to being paid by the State in depreciated paper, which, in any event, could not always be turned into money. Pepys's *Diary* records scenes of "very great disorder" when the Navy Pay Office was besieged by angry seamen demanding settlement out of funds that simply did not exist. And there can be no doubt that the little Secretary's heart bled when he heard "the lamentable moan of the poor seamen that lie starving in the streets for lack of money."

The Press sought to remedy the lack of volunteers—grievously aggravated by the toll exacted by the Great Plague—by the indiscriminate seizure not only of every

<sup>1</sup> After the recession in trade which characterized the Commonwealth and Protectorate, it took the Exchequer 12 years to bridge the gap between revenue and expenditure, which averaged some £400,000.

<sup>2</sup> *Samuel Pepys and the Royal Navy.* J. R. Tanner.



type of shipman,<sup>3</sup> but of artisans, apprentices, "poor patient labouring men and housekeepers."<sup>4</sup> As an additional means of manning the ships, the Lord High Admiral's Maritime Regiment of Foot<sup>5</sup> was formed in the October of 1664; but this did little to make good the abiding shortage of skilled seafarers.

It was not that the spirit of patriotism was wanting. After the 'Four Days Battle' against the Dutch, of June, 1666, in which the old, well-loved 'tarpaulin captain,' Sir Christopher Myngs, had been mortally struck down, "a dozen able, lusty, proper men" eagerly sought permission to fit out a fireship and set off straightway to "do that that shall show our memory of our dead commander, and our revenge." It was in a spirit no less sturdy and courageous that a largely unpaid and indifferently nourished<sup>6</sup> fleet held their own and eventually got the better of their enemies in two gruelling and costly conflicts. Their admirable showing was certainly not due to any effort on the part of Parliament to support them. For its members had sedulously failed to vote sufficient supplies even to implement Pepys's modest aim to pay the foremast hands "once a year at furthest." Brooding on the callous neglect of his treasured shipmen for which 'the faithful Commons' had been responsible, it is small wonder that the King morosely confided to Lady Jerningham that "the more you stir a man of politics, the more he stinks."

It was Charles himself who eventually found the money of which his fighting marine was so desperately in need. For of the first instalment of £84,700 of the 'loan' made him by Louis XIVth, Charles paid £76,000 straight into the Navy's coffers. As a result of this fortifying 'blood transfusion,' many of the reforms, which had long been accepted in principle, could at last be given something approaching actuality. The A.B.'s monthly sea-wage of 24s., like the 19s. of the ordinary seamen, the 14s. 3d. of the grommets,<sup>7</sup> and the 9s. 6d. of the 'boys,' had no longer to be discounted at considerable loss; the scale of subsistence was vastly improved, and there was even a pension scheme for the dependants of the slain and those incapacitated on active service. It was still necessary, however, to call on impressment to make good shortages in the lower deck personnel.

The drain on man-power, imposed by the costly Third Dutch War, persuaded the authorities to sanction a bounty scheme to encourage recruiting; while efforts were made to complete a comprehensive register of seamen.

The end of a costly war found the Navy deeply in debt. But a shift in Gallic policy rendering conflict with France a lively possibility, Parliamentary alarm was sufficiently acute to sanction a Navy Vote which not only cleared up a load of debt, but put 30 new vessels on the stocks. In 1660, the number of men borne on the sea establishment had been 19,551; by the time James II was established on the throne, it had passed the 40,000 mark, of which total a very fair proportion was made up of volunteers.

<sup>3</sup> Many men evaded service in the Navy by signing on for long ocean-going voyages in the mercantile marine; some even went over to the hostile Dutch.

<sup>4</sup> Pepys.

<sup>5</sup> Later to be known, of course, as the Royal Marines.

<sup>6</sup> Undernourished not only in food but in munitions. When Charles's prospective bride, Catherine of Braganza, had landed at Portsmouth, for example, there had been insufficient powder to greet her with a Royal Salute, and conditions had changed little for the better.

<sup>7</sup> The naval equivalent of apprentices.

James II, as one of the most able administrators the Service has ever had, strove hard to put the Navy on a really sound footing.<sup>8</sup> At the same time he sought to further the interests of the mercantile marine by the appointment of 'Commissioners for promoting the Trade of the Kingdom'—the forerunners of the present-day Board of Trade. With reforms vigorously in progress in both branches of the Service, voluntary recruiting for the Royal Navy picked up, and the activities of the press-masters were proportionately abated.

In the substitution of an astute but shifty little Dutchman for the well-intentioned but pig-headed James Stuart, the Navy's part, confused and irresolute as it was, can hardly be said materially to have affected the issue. But Orange William's determination to dominate the Channel and preserve the Rhine delta from Gallic conquest called for naval forces on such a scale that there could be no hope of manning the fleet without recourse to impressment. The victories of Barfleur, La Hogue, Malaga, and Marbella, like the capture of Gibraltar and Minorca, were achieved by a Navy manned as much, and more, by the press-master as by voluntary enlistment.

\* \* \*

The War of the Spanish Succession is chiefly remembered for the corruscating victories of the Duke of Marlborough. They were rendered possible and given real validity, however, by the Navy's command of the Channel and the fact that "the Mediterranean was fastened with an English padlock."

The Peace of Utrecht, which brought hostilities to a close, was followed by a tranquil period lasting just over a quarter of a century. That this quiet interlude was seized upon to pare the fighting forces down to the very bone almost goes without saying. There has never yet been a British Parliament that was not prepared, with the utmost complacency, to consign the sword on which the country's salvation so recently depended—and would surely depend upon again—to contemptuous oblivion and neglect.

Fortunately, from one point of view, there were too many sinecurists and salaried officials dependent upon keeping a fleet in being for the Navy to suffer the wholesale disregard that otherwise would have been its portion. But with an establishment of officers and men which had shrunk from the 27,000 on the books in 1715, to an authorised total of less than a quarter of that number, there was little call on the press-masters' services.

The mercantilist-inspired 'War of Jenkins's Ear,' and the conflict brought on by the dispute over the Austrian Succession, speedily revealed the sorry state of decay into which the Navy—as regards both ships and the hands to man them—had been allowed to drift.<sup>9</sup>

Alongside the measures taken to reconstitute the fleets, a procedure was worked out whereby the shortage of man-power could in some sort be made good. The prime source of supply was, of course, the experienced seaman already serving in the mercantile marine. An individual who had been paid and thoroughly taught his business

<sup>8</sup> The liabilities of the Navy Office on the Lady Day of 1686 stood at £171,836. In view of the strain on resources imposed by the war years this was a remarkable reduction on the £1,277,161 owing 20 years earlier.

<sup>9</sup> With regard to the battleships, they had been so carelessly designed and fabricated that one admiral acidly commented that they must have been "manufactured by the mile and cut off in chunks when required."

by 'trade,' could be beguiled into voluntarily transferring to the fighting marine, or seized and forcibly enrolled in it by virtue of the warrants issued to the ships' captains authorizing them to impress men for the King's service.

Volunteers were secured—a modest rally of them—by parades and bands and banners, and tremendously hearty harangues depicting in glowing terms the delights of life aboard a man-o'-war, the unceasing flow of grog, and the spanking dividends to be earned by way of prize money. Sometimes the appeal was made by crudely-printed but flaming posters, of which the following is a typical example.

WANTED, in consequence of the great promotion of Warrant Officers since her arrival in Port Royal only three months ago, a few Able-bodied SEAMEN, who will have every chance to work up and fill the vacancies of Petty Officers, and who will be sure of obtaining comfortable livelihoods, by entering upon the SALISBURY early; where they will have plenty of liberty to go on shore to enjoy themselves, and whilst on board, as much dancing to a first-rate band every night with the PORT ROYAL LADIES as they can stand to. And as a further encouragement for good men to enter, the Commander-in-Chief has authorised me to offer a bounty of 1*l*, 1*s*, a head out of his own pocket, upon approved seamen, to drink with his messmates and YOUNG LADIES to the health of the KING—God bless him!

Huzza!

Huzza!

Huzza!

————— Flag Captain.<sup>10</sup>

With a personally popular captain, or with one reputed to be 'lucky' in the matter of capturing prizes, such an appeal might well produce volunteers up to 12 to 15 per cent. of the ship's company.<sup>11</sup>

With the foundation of the Marine Society by Jonas Hanway in 1756, a slightly different kind of volunteer was forthcoming from the boys maintained and educated by this philanthropic institution—the children of poor or destitute parents, orphans, waifs and strays, or lads convicted by the magistrates for petty misdemeanours. Brought up to regard life at sea as their inevitable destiny, and given a little elementary training in a ship stationed in the Thames, whether their service was voluntary in the strictest meaning of the term must remain a matter of considerable dubiety. Suffice it that between 1756 and 1815, nearly 31,000 of these lads were recruited to the Fleet.

With these two sources of voluntary enlistment exhausted, the press had to be relied upon to make good the balance of personnel needed to put a vessel into commission.

Impressment made its biggest haul from inward-bound merchant ships, which were boarded in the Channel or just as they made home waters. Sometimes the 'press' was so sweeping that the merchant skipper was left with insufficient men to make his home port. He might protest and invariably did in no uncertain terms. But, providing there was a commissioned officer with the boarding party, the infuriated master was virtually without remedy in his dilemma.

<sup>10</sup> As published also, in display type, in the *Jamaica Courant*.

<sup>11</sup> Half a century later, the *Victory*—widely known as a 'happy ship'—had a ship's company in which 20 per cent. were volunteers.

Not infrequently, however, human ingenuity succeeded in cheating the boarding party of its prey. On one occasion when the East Indiaman *Moffat* arrived in the Downs from Calcutta, it was plain that the vessel would be unable to elude the Navy tenders lying in wait for it. It was then that the *Moffat's* cooper bethought himself of the twenty spare hogsheads put aside for transporting dry goods. They were fine, sturdy barrels and could easily conceal, as he pointed out, one member of the crew apiece. In a trice, a score of the hands had gone into hiding in the casks, wherein—ranged along the steerage—they managed to get an occasional mouthful of fresh air by breathing through their respective bungholes.

When the naval boarding party came over the side to search the ship, the captain explained with great solemnity that the smallness of his crew was attributable to the fact that the *Moffat* had already been visited by the Deal tender, which had departed bearing away the pick of the forecastle. A thorough search of the East Indiaman having failed to bring the hidden seamen to light, the boarding party sullenly took its departure. Not until the *Moffat* was well upstream was it deemed safe to unhead the casks and release their occupants, none the worse for their lengthy incarceration—not even the unfortunate individual whose barrel had accidentally been upended and who, in consequence, had spent the best part of two hours standing on his head!

For a time this method of waylaying homeward-bound merchant vessels<sup>12</sup> served well enough to make good the shortage of manpower between decks in H.M. ships. But, as the latter half of the XVIIIth Century wore on and the scope of conflict increasingly broadened, other devices had to be employed to meet the needs of a fighting marine that was busily engaged upon its 'lawful occasions' in every quarter of the globe.

An official shore-based Impress Service came into being which, in its heyday, called for the whole-time services of no less than 24 captains and 56 lieutenants.

Offices and depots were set up all over Britain wherever it was thought likely that seafarers might congregate. And from these centres the men of the press-gang would sally forth, cutlass on thigh<sup>13</sup> and stout cudgel in hand, to seek out what they might find. That they did not search in vain is witnessed by the fact that in a single twelvemonth—actually in 1776—800 fully-qualified seamen were gathered in by the press in London alone; while John Norton of Oriston, a lieutenant of 41 years' service, by his own personal efforts, rounded up just over 3,000 recruits over a period of nine years. Once 'in the net,' the 'catch' was despatched, under escort, to one or other of the reception hulks situate at the principal ports—and anything fouler, more overcrowded, and generally wretched than these teeming depot ships it would be difficult to imagine.

In their forays the press-gangs in no way disdained such foreign seamen as might fall into their clutches. So indiscriminating was their procedure, indeed, that Frenchmen were cheerfully impressed to fight against their fellow-countrymen; the 71 men of alien extraction aboard the *Victory* at Trafalgar, for instance, included several *matelots* of Gallic birth. Equally, a number of English seamen exchanged life aboard a British man-o'-war for more generously remunerated service in the

<sup>12</sup> The press only applied to incoming vessels; ships outward bound were immune from interference.

<sup>13</sup> Less for use than for effect, in the same way that warships continued to carry high poops long after their questionable usefulness had ceased, "for their majesty, and to astonish the enemy."



flourishing American mercantile marine, or even in the United States' Navy. Indeed, a contemporary chronicler recorded that the petty officers "consisted almost wholly of the first order of British seamen." It was the British Government's insistence on the right to search for, and forcibly remove, such men from American vessels that contributed so markedly to President Madison's declaration of war in 1812; a tragedy precipitated by the action of the captain of the *Leopard*, who first opened fire on the U.S. warship *Chesapeake* and then sent a boarding party forcibly to remove four alleged deserters from her deck.

Yet it was far from unknown for American sailors to seek service aboard a British man-o'-war; an Admiralty return of 1811 listing no less than 3,300 of them as in Naval employ.<sup>14</sup>

Men incarcerated for debt were given the choice of staying 'in durance vile' or entering for the Navy, and not all of them elected to continue in the enjoyment of Marshalsea Prison's dubious amenities. Another quota of virtually involuntary recruits was furnished by the 'Lord Mayor's men,' gay young sparks, caught drunk within the City precincts or arraigned for creating a disturbance in a bawdy house, and brought up for summary punishment before the City's chief magistrate. With service aboard one of H.M. ships as the only alternative to public exposure and a scandal that would have brought disgrace on their families, many of these young sprigs of distinguished lineage sought that oblivion for their misdeeds which the lower deck so conveniently offered them.

Under the provisions of an unrepealed Act of Queen Elizabeth's reign,<sup>15</sup> 'sturdy rogues and vagabonds' formed another rather unhandy contingent of landlubbers for the Navy to try to turn into seamen. The measure was fully exploited by local benches only too anxious to relieve their parishes of the sort of shiftless ne'er-do-well who constituted a perpetual burden on the rates. Not infrequently, indeed, magisterial powers were stretched to rid the community of men who, even by the most elastic standards, indubitably ranked as criminals. The introduction of such undesirables into the fleet inevitably exerted a bad influence, and the outcome was a marked increase in the incidence of crime. Matters were in no way bettered when, with the inability that arose, under wartime conditions, to transport convicts to serve as indentured labourers in America and the West Indies, they were swept wholesale into the fleet. As the contemporary saying had it, "a man-o'-war, like the gallows, refuses nothing"; and although apprentices and journeymen who could produce their indentures were supposed to be immune from impressment, it was a provision more honoured in the breach than in the observance.

But the Navy's insatiable maw demanded even further sustenance. So in 1795, when the man-power crisis was at its height, another measure was enacted to the effect that each county and each seaport should raise a quota of men for the sea service proportionate to its size and population. Thus a large county such as Yorkshire was called upon to produce 1,081, as against modest little Rutlandshire's 23. As one of the Country's leading ports, London was set down to recruit 5,704; a total which must have served to introduce some very queer customers into the fleet. A bounty, the amount of which was fixed by the respective local authorities, was designed to sugar the pill of entry into a rough and exacting service. But all too

<sup>14</sup> The U.S. Navy Department had a docket of 6,500 men alleged to be serving in British ships when war was declared between the two countries in 1812.

<sup>15</sup> 14 Eliz. Stat. I., Cap. V.



often the lust for bounty-snatching brought forward a very different type of applicant; and one whose lavish bribe, incidentally, induced a good deal of heart-burning in the breasts of better men, who had volunteered or been pressed earlier, with cheeseparing bounties or none at all. "One of these objects," recorded Captain Brenton, "on coming aboard a ship of war with a £70 bounty, was seized by a boatswain's mate who, holding him up with one hand by the waistband of his trousers, exclaimed, 'Here's a fellow that cost a guinea a pound!'"<sup>16</sup>

At all events, by one means or another, the Navy, whose total of hands in 1740 had stood at 36,000, by 1815 had acquired a personnel numbering 140,000, a figure that could be duplicated by the losses from battle casualties, disease, and desertion. If it could be said of them, as Wellington said of his army, that a large proportion of them were "the scum of the earth," it could be averred with equal truth, in both instances, that it was 'really wonderful' that they should turn out the 'fine fellows' they undoubtedly were.

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One of the results of wholesale and indiscriminating impressment was the introduction into the community of the lower deck of a number of political malcontents and social misfits, whose half-baked notions with regard to egalitarianism and 'the rights of man' were scarcely helpful in the maintenance of discipline. One such typical 'sea-lawyer' was Richard Parker, the ringleader in the Nore mutiny, which, far more than the refusal of duty at Spithead, had a distinctly Jacobinical flavour about it.

Possibly it was dislike of these 'King's hard bargains', brought in by the press, which persuaded certain by no means squeamish naval officers to condemn this particular method of recruitment *in toto*. Captain Edward Thomson detested the system because, as its outcome, "you have aboard the collected filth of gaols; and there's not a vice committed on shore that is not practised here."

Lieutenant Tom Lorimer<sup>17</sup> was equally emphatic, writing in his *Journal* that "the press is a crying shame. Its injustices fall heavily on the honest clodhopper who wishes to pursue his occupation on land; and its net sweeps wide and often brings in a stinking catch. It is necessary to man our ships, but surely, if the humble seaman's life was more tolerable and less degraded, sailors would be easier to come by? All honour to him that in spite of the existence he is forced to lead in some vessels, the British tar is generally of the bravest and the best, worthy of the noble ships that carry him."

Admiral Vernon was even more scathing in reference to the measures by which ships' companies were forcibly and unselectively recruited. "The common sailors," he pronounced, "undergo innumerable dangers and hardships with alacrity, courage, and cheerfulness which can hardly be expected of men, whose miseries are hourly aggravated by oppression, and who have, therefore, so little reason to love the community for which they suffer. But our fleets," he concluded, "which are defrauded by injustice, are first manned by violence and then maintained by cruelty." He went on to outline a plan to make the Royal Navy attractive to all seafarers, and render them willing to serve in it for a period, by rotation. This was to be accom-

<sup>16</sup> Quoted by Michael Lewis in his work *The Navy of Britain*.

<sup>17</sup> Subsequently Admiral Sir Thomas Lorimer, K.C.B., M.P.

plished by means of more considerate usage, more 'liberty time' ashore, better food, higher pay, proper treatment for the sick, and a comprehensive scheme of pensions.

Needless to say, Vernon's recommendations were ignored, for they were, alas, far in advance of the prevailing 'climate of opinion.' Even the underlying implications of the Nore and Spithead mutinies were lost on the responsible authorities. For although they may have resulted in something more approximating to a square deal for the sailor, the great fundamental principle embodying the security which only comes of continuity of service, carrying with it the right to a pension, had yet to be recognized, let alone accepted.

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The dissipation of the Napoleonic legend of invincibility on the field of Waterloo was the prelude to one of the longest interludes of peace the major powers of Europe have ever enjoyed. But while general impressment was no longer called upon to man the fleet, it would be less accurate to say that it was abolished than to record that it fell into desuetude.

Abandonment of the press was rendered possible by the belated acceptance, in 1853, of the principle of the whole-time professional, or long service naval rating, voluntarily recruited; and with the obligation to put in a certain period on the Reserve nicely balanced by unassailable pension rights.

Thus, for the first time in British history, the fleet that went to the Crimea was entirely manned by volunteer crews. The sailor's status had been restored; his standing in public esteem was as high as it had been in the days of 'Gloriana.'

Naturally enough, the tremendous demands made on the Royal Navy by the two world wars could not be met without recourse to the reservists, the 'pool' of magnificent material represented by the mercantile marine and the fisherfolk, and the many 'amateur sailors' who unhesitatingly exchanged their yachting caps for the headgear appropriate to their Service rank or rating.

Even so, National Service—a press-gang operated by card-index—had to be called upon to make good deficiencies in man-power. Thereafter it was found that so keenly does a flourishing industry compete for the right type of man, that even in post-war days of relative peace, the Senior Service required—as it continues to require—an annual intake of 4,000 to 6,000 National Servicemen to keep it up to strength.

It cannot be reckoned as anything but an immortal pity that, once established, the voluntary principle in manning the fleet has had to yield to a combination of circumstances which render recourse to a certain amount of conscripted service ineludible. But there it is: the needful number of men must be brought in and trained in the ways of blue water and of combat. For, as Admiral Sir Charles Napier never ceased to affirm, "It is seamen, not ships, that constitute a Navy."

## A PROPHET IN THE EAST

By CAPTAIN T. A. GIBSON, The Wiltshire Regiment

IN his autobiography *Light on a Dark Horse*, Roy Campbell, the South African poet, observes: "The direct result of the Revolution in France was the wholesale conscription of citizens, bourgeois, and artisans and the lowering of the military profession from a voluntary and highly poetical vocation to a form of punitive drudgery."

If conscription was the direct invention of the French deputies of 1792, another source, albeit a German one, alleges that the creation of another modern military problem, the German General Staff, was at least a close by-product. The late General Guderian, in his book *Panzer Leader* states, concerning the General Staff: "Its godparents were the spirit of Frederick the Great and the national desire for freedom from Germany's oppressor, Napoleon."

To subscribe to both these views against the background of Europe today is perhaps tempting to one's sense of the ironical. France—the originator of the nation-in-arms, the spirit of Revolution, and the New Order—tumbles her Governments down with unhealthy frequency, mainly on the bitter topic of German rearmament, with its haunting bogey of a resurrected General Staff. Germany—the perfecter of the nation-in-arms, the creator of a military intellectual elite to mould and direct that nation-in-arms, and the aider and abettor of the rise of Communism—lies unarmed, divided, and with almost one-third of her people under the tyranny of Communism.

Will these two great nations bury their ancient enmity in the face of their common danger from Communist imperialism? This is certainly the fervent hope of the free nations of the West who point to the Schuman Plan and, now, N.A.T.O. as the ideal mediums for this reconciliation. However, it is perhaps interesting to recall that as long ago as 1922, when national war wounds were still savage and even aggravated, a European of some reputation was calling for a Franco-German rapprochement in the fullest sense, politically, militarily, and economically; also that he was urged to this great aim by an appreciation of the designs of Russian Communism for world domination. Interest in this lone, warning voice among the Franco-German hate of the twenties is possibly deepened by the facts that he was a German, a soldier, and an ex-member of the Great General Staff. He was Major-General Max Hoffmann, probably best known as the 'ghost' author of the Battle of Tannenberg.

Bitter though his feelings were against the French, Hoffmann saw with grim clarity the sinister international aspirations of the new political creed emanating from Moscow. He was eminently qualified to depict this danger; he had served the entire 1914-18 War on the Eastern Front and knew the Russian mentality intimately. Moreover, he had negotiated with the Bolsheviks headed by the notorious Trotsky at Brest-Litovsk, and had no illusions. Starkly exposed during those long weeks of interminable wrangling had been the true character of international Communism, ruthless, unscrupulous, and insatiable for power.

At the outbreak of war in 1914, Hoffmann was a battalion commander in Alsace who had known for the previous two years that his appointment on mobilization would be First General Staff Officer (Operations) to the Commander-in-Chief of the forces to be deployed in the east. He had already emerged as a Russian expert. After his graduation from the Staff College in 1898, he had qualified as a Russian

interpreter and later spent six months in Russia. In 1904-5, he attended the Russo-Japanese war as an observer in the field with the Japanese Army, an experience which considerably broadened his narrow professional outlook. Apart from the valuable insight he gained on Russian tactics, he was deeply impressed with the awakening might of Asia. After 1905, he was mainly employed in East Prussia where he became expertly versed in the technicalities of the great Schlieffen plan, the holding of the cumbersome Russian armies with thin forces in the east while the preponderance of German strength sought a quick decision in the west. It was in the execution of the eastern and subsidiary part of this master plan that Hoffmann first made his subtle niche in history.

The course of Russian operations against Germany on the outbreak of war in 1914 was fairly confidently predicted by the German General Staff. It was known that East Prussia would be invaded by two Russian armies, one from Vilna and the other from Warsaw, and that any general advance by these two armies would be clove in two by the chain of the Masurian Lakes. The Schlieffen plan was that the inferior German forces would manoeuvre to take full advantage of the lake country and fall with their concentrated strength on the first Russian army to appear.

On the first day of mobilization, Hoffmann reported to the headquarters of the 8th German Army which was assembling at Posen; on the 8th August, 1914, the Army Commander, Colonel-General von Prittwitz, with his Chief of Staff, Major-General Count von Waldersee, assumed command of the fully mobilized army, strength three active corps, one reserve corps, one cavalry division, one independent reserve division, and three Landwehr brigades. The Vilna army under Rennenkampf was the first adversary to appear on the frontier and on the 20th, the 8th Army, less one corps left watching the south for the approach of the Warsaw army, attacked in the area of Gumbinnen. By the afternoon, both flank formations of the army were successful but the centre had been repulsed and defeated. That evening, in an already tense atmosphere, a portentous message came into Army Headquarters: the Warsaw army, composed of four to five corps and three cavalry divisions, was crossing the frontier well in rear of the 8th Army along the line Soldau-Ortelsburg.

Hoffmann, who was quite confident that the attack on the Vilna army would succeed inevitably by envelopment, jokingly remarked that the report should be suppressed as the nerves of the Commander and his Chief of Staff were not strong enough at present to receive it. But von Prittwitz had already had the message. He announced, despite Hoffmann's protests, his intention to break off the Gumbinnen battle at once and retire the army behind the Vistula. Hoffmann immediately pointed out that such a retirement was now impossible as the leading troops of the Warsaw army were nearer to the Vistula than they were. Gradually he won von Prittwitz around to his arguments. The result of his entreaties was that while the decision to disengage at once from the Vilna army stood, the retirement to the Vistula was cancelled and offensive action would immediately be taken against the menacing Warsaw army. Orders were issued that evening for the 8th Army to retire south-west along the southern shield of the lakes to concentrate for the actions which directly led to the Battle of Tannenberg with Samsonov's Warsaw army.

Meanwhile, destiny began to play a hand. Von Prittwitz had telephoned that afternoon to von Moltke at G.H.Q. to inform him of his decision to retire the army behind the Vistula, but had neglected to telephone later the change in plan. On the afternoon of the 22nd, a telegram was received at 8th Army Headquarters giving the



time of arrival of a special train. The train bore a new Commander and Chief of Staff, the historic pair of Paul von Hindenburg, the elderly Hanoverian general brought from retirement, and the dynamic Ludendorff, fresh from triumph at Liège.

Popular versions of Tannenberg give several reasons for its conception. One is that Hindenburg planned the battle almost a generation before when he was a General Staff Officer serving in Prussia; another is a picture of Hindenburg and Ludendorff receiving a series of 'sitreps' as their train raced across Germany and their telegraphing orders from various railway stations as the situation developed. The actual case was nothing so romantic or dramatic. By the time they both arrived at their destination, the strategic battle procedure was well under way. All Hoffmann had to tell them in his briefing regarding the dispositions of formations and the plan about to unfold was approved without comment.

The Battle of Tannenberg, fought from the 24th to the 30th August, yielded 92,000 prisoners, destroyed the Warsaw army, and caused the suicide of its Commander, Samsonov. The victory was due not only to the efficient and energetic execution of the German corps commanders, especially von Francois and von Mackensen, and to the staunch performance of their troops, but also to the incredible mistakes of the Russians, e.g., operation orders issued in clear over the wireless and the mysterious, even sinister, ignoring by Rennenkampf of Samsonov's repeated calls for help. The decision to fight the battle, however, was taken on the responsibility of von Prittwitz; the fulfilment of that decision was the responsibility of Hindenburg. Full credit, nevertheless, must be given to the rocklike Hindenburg who coolly pressed the critical phase of the battle, the breakthrough at Usdau on the 26th, when even Ludendorff's nerves were beginning to fray. "If the Battle of Tannenberg had been lost there can be no question who would have been held responsible."<sup>1</sup>

After Tannenberg, the 8th Army quickly changed front to march north-east to close again with the almost stationary Vilna army, which it sent reeling out of Prussia in the Battle of the Masurian Lakes from 9th—14th September. The triumvirate of Hindenburg, Ludendorff, and Hoffmann, though with the latter very much a 'backroom' force, went from success to success; their ultimate failure in 1915 to destroy the Russian armies entirely was caused only by the persistent milking dry of the Eastern Front to sustain operations in the west and on the Austro-Hungarian fronts, and the 'iron energy' of the Grand Duke Nicholas in reforming the front.

In August, 1916, Hoffmann stepped more into prominence. On the fall of von Falkenhayn from Imperial grace, Hindenburg and Ludendorff were summoned to G.H.Q. and Hoffmann became Chief of the General Staff to the new Commander-in-Chief, East, Field-Marshal Prince Leopold of Bavaria. The Eastern Front now extended from the Baltic to the Carpathians, with its headquarters at Brest-Litovsk, and consisted of three German army groups and two Austrian armies. An entry in Hoffmann's diary in late 1916 shows that even highly-gifted German General Staff officers can weary of it all: "From the Carpathians to the Gulf of Riga I have my own special railway carriage, and more often than not a special train, automobiles, full dress receptions wherever I arrive. I shall feel very strange when I take over my infantry regiment after the war. And yet I would not be sorry to do it today. The anxiety and responsibility are very great, and they make one so old."

Apart from the mass of tactical work that devolved on him, Hoffmann was also plagued with countless political problems. With the overthrow of Russian rule,

<sup>1</sup> *Panzer Leader*.

the rival claims of Poles, Lithuanians, and Letts were vehemently aired; relations with the Austrians were perennially tense and irritated and, to add to his labours, a steady stream of politicians and princelings poured in from Berlin, lobbying for their current enthusiasm on how to win the war quickly and cheaply or just 'rubber-necking.' It was, incidentally, a political topic, the Polish question, that abruptly severed the long-standing intimate collaboration between Ludendorff and Hoffmann. When the Kaiser broached this question to him, Hoffmann strongly advised against any annexation of any part of Poland. With a foresight borne out only too truly by the minority crises of the thirties, Hoffmann declared that Prussia had never been able in the past to control her Polish subjects properly and it was improbable that any future attempt would be any more successful. This view infuriated Ludendorff.

The outbreak of revolution in Russia in March, 1917, came as a welcomed, though not unforeseen, respite. The despatch of the archpriest of revolution, Lenin, across Germany in a closed train from Switzerland to Russia to bring the risings to the fullest ferment was, Hoffmann avers, purely a German Foreign Office decision, though he agrees that the introduction of Lenin to the Russian scene was a logical military weapon. By November, 1917, the Bolsheviks had gained full power and soon afterwards a message was received from the new Russian Government proposing an armistice. After some misgivings on the possibility of negotiating with such people as the Bolsheviks—the new Russian C.-in-C. had only just risen rather meteorically from the rank of corporal—the German G.H.Q., on Hoffman's urging, agreed. On the 2nd December, the Russian armistice delegation arrived at Brest-Litovsk. Hoffmann was appointed by G.H.Q. to be their representative and adviser to von Kuhlmann, the Secretary of State.

As an advance notice of their technique to be used at many future international conferences, the Russians set about at once using the discussions for propaganda purposes. Almost immediately they called for free and friendly intercourse between their disaffected troops and the German forces; another demand was the unhindered admission of Communist literature and other forms of propaganda into Germany. Hoffmann politely declined this last offer but added, with his tongue in his cheek, that he would be glad to assist in its export to France and England.

An armistice was soon concluded and then peace talks began. These further discussions suffered a temporary breakdown until early January, 1918, through the Bolsheviks' arrogance in presuming that they would be able to retain the old 1914 frontier with its inclusion of Poland and the Baltic states. Commissar for Foreign Affairs Trotsky then appeared, and he plugged even more the propaganda aspect; to get a wider platform for his harangues he suggested that the venue of the talks should be switched to Stockholm. Despite von Kuhlmann's skill in diplomacy, Hoffmann was the dominant personality at Brest-Litovsk. His role of the mailed fist in the velvet glove, to be unsheathed at exactly the right tactical moment, was played admirably. Moreover, with patient firmness, he held the Quadruple Alliance team together, for the Austro-Hungarian representative, desperate to return to Vienna with peace news to save the tottering Hapsburg empire, lost his nerve completely at the frequent Bolshevik threats to abandon the talks. By early February, Trotsky was so cornered that he declared that, while Russia would sign no peace treaty, she regarded the war as at an end. This bland statement almost satisfied the diplomats but its vagueness was too untidy for Hoffmann's General Staff outlook. He at once recommended to G.H.Q. a resumption of hostilities. The ensuing general advance of

the German forces against the disorganized and demoralized Russians soon had the Bolsheviks clamouring for peace. The treaty was signed on the 3rd March, 1918.

The final phase of 1918 Hoffmann spent mainly embroiled with further political work. In the last year of the war his estrangement with Ludendorff was complete. At their last meeting in Berlin in April he heard Ludendorff observe that for the coming offensive in the west he was uncertain whether the better plan would be to 'probe' the Allied front with individual attacks or to make a tremendous drive with concentrated forces at a given point. "Excellency," Hoffmann said, "any second-lieutenant who tried to answer the question in that way would be hopelessly ploughed in his examination." After that they never spoke.

With the end of the war and the death knell of the old Imperial Army, Hoffmann retired to live in Berlin. With his forthright personality he quickly became the centre of an advanced, in the eyes of some even almost traitorous, school of thought which called for a Franco-German rapprochement. His foretaste of the new godless, materialistic imperialism at Brest-Litovsk left him with no illusions. His answer was for the two greatest continental powers to combine to save Europe. He knew that if France and Germany came together then England must necessarily join them too.

In his last years he lived the existence of a grand seigneur, his house a rendezvous for soldiers, diplomats, and businessmen of several nationalities who thought as he did of Communist ambitions. To these he preached his constant theme, that Moscow was the root of the troubles afflicting the world. Even in August, 1918, he had wanted to march on St. Petersburg to overthrow the Bolsheviks and install any type of government that would live in peace with the rest of Europe.

What manner of man was Hoffmann? In his youth he was human enough to be a great drinker, one of those rare, robust characters who are able to drink to 7 a.m. in the Officers' Club and then proceed unaffected to barracks to go on parade. His ability to speak well, his wit and intellect combined with a noted tactical flair, marked him out at an early stage in his career. In his more senior years, his cropped head, pince-nez glasses, and large frame impeccably uniformed, gave the impression of the typical Prussian General Staff Officer. However, the range of his mind and his articulacy retrieved this severe appearance, which it was a slight eccentricity of his to cultivate.

As a soldier, his profound strategical and tactical grasp was never challenged by a defeat. It is true that he remained throughout as a staff officer, but when Prince Leopold of Bavaria assumed command in the east, he was in effect the real commander. Not that the Prince was not a clever and accomplished soldier, but the hardheaded formation commanders looked to Hoffmann for the decisions. He was also not merely the gifted technician, defeating the enemy with his dividers poised over a small scale map to work out great problems of time and space with utmost efficiency. Like Field-Marshal Viscount Montgomery, Hoffmann believed in thrusting himself fully into the psychology of his enemy. Again and again his estimation of the Russian character saved the situation, at Tannenberg, later on the Eastern Front when the line was dangerously thin, and also at the talks at Brest-Litovsk. Of the astounding Russian wireless messages in clear at Tannenberg he says: "Grunert, the Quartermaster-General, again and again asked me anxiously if we should believe them. Why shouldn't we? . . . I believed every word of it, on principle. And then the great question whether Rennenkampf would march to Samsonov's assistance.

'I'm damned if he will,' thought I. I had heard of the scene on the Mukden railway station. Samsonov had then reproached Rennenkampf most bitterly for having left him in the lurch at the Battle of Mukden. The mutual explanations became rather heated, and both gentlemen boxed each other's ears. . . . I felt certain that Samsonov would now be paid out. I don't know whether the scene at Mukden was at the bottom of it, but it did, in fact, not occur to Rennenkampf to march to Samsonov's assistance."

Hoffmann did not survive the war for very long. The crushing responsibilities of the war years, when he invariably drank tumbler after tumbler of cognac to sting his brain out of the ever-present tiredness, when his few hours of nightly sleep were forever subject to interruption, had taken their toll of his physique. In July, 1927, he died. To the end he dreamed of the day when British, French, and German armies would march against Moscow to destroy the Communist Empire. But if his hate of Russian Communism became an obsession, he remained true to the realism of his General Staff training. He knew that his anti-Communist crusade was very much a long range project. In fact, he declared himself that it was unlikely to happen before "England's colonies and Asia are ablaze." This prophecy has now an ominous ring of reality.



## A BEDUIN REGIMENT

By LIEUT.-COLONEL J. D. LUNT

"As herdsmen and wolves, soldiers and Beduin may never agree together."

C. M. DOUGHTY in *Arabia Deserta*

**M**OST of the good things in life are unexpected. My appointment to raise an armoured car regiment in the Arab Legion certainly was. In fact, nothing had been further from my thoughts. At the time they had been concerned exclusively with preparing a realistic training programme for the 800 Z reservists due to join my Yeomanry regiment's annual camp in six weeks' time. But, instead of training yeomen I found myself 2,000 miles away in Jordan. I regret that I had little time to spare a thought for my wretched successor in the Yeomanry struggling to reduce my theory to practice.

Prior to landing in Jordan in September, 1952, my acquaintance with the Middle East had been limited to two years in Fayid with my regiment. There I had learned to say "Imshi!" and dislike the locals. Other than that, I knew nothing of the Arab, his language, or his customs. Perhaps I should have been more use to the Legion had I done so.

The regiment that I was about to form was a Beduin one. So well had the Beduin taken to armoured cars that it had been decided to raise a second armoured car regiment. As there still existed a few armoured car platoons in infantry regiments, where they were used for reconnaissance, it was decided to form the nucleus of the new regiment by amalgamating them. Not unnaturally this gave various infantry commanding officers a wonderful opportunity to unload some of their oldest soldiers with even longer conduct sheets! But such is the way of the Army!

By September, 1952, the regiment had been in existence for about two months. Its officers—all five of them—had come from the infantry with the idea that an armoured car was a tank. Only one of them spoke any English worth the name, and he was removed a month after my arrival and sent to England on a course. There was an interpreter whose English was of the flowery variety, and who, as a town Arab, was cordially disliked by the soldiers. Under such conditions it is astonishing how quickly one can pick up a language!

Money in the Legion, as in any other army, is always much less than efficiency requires. My regiment was well down the priority list. We inherited a camp which had been built by a rascally contractor who had put it up in record time and fled to the Lebanon with a record profit. His major accomplishment was to ring the cookhouses with a series of deep trench latrines which it has taken us three years to remove.

There were no roads, no workshops, no messes, and no canteen. The barracks looked as if at any moment they would give up the unequal struggle and return to the dust. The R.S.M., a splendid Arab with two decorations for bravery, tried to show me a few days after my arrival how bad the barracks were. He leant heavily against one of the walls and it collapsed with the R.S.M. after it. It was very hot, and every day a furnace-like wind started about midday, blowing great clouds of dust out of Zerka town and depositing them on my cookhouses where the cooks were preparing lunch.

Standing Orders, tactics, lectures, and most of the other matters of everyday military life were non-existent. There was no L.A.D. and we had only two vehicle mechanics. The armoured cars all had lists of deficiencies running into several pages. Besides them we had a few Landrovers and a couple of veteran water carts. Finally, there hung over our heads the imminent threat of disbandment since no one knew if we were to be 'authorized' or not. When one surveys the Regiment now, almost at full strength in men and equipment, one can afford to laugh ; but it was depressing at the time.

Those were the debits. But they were vastly outweighed by the credits ; the loyalty, charm, and never-failing humour of the Beduin soldier, whose comradeship I shall value to the end of my life. What is more, they were all keen to learn and got an enjoyment out of training which added zest to it for me.

What was more difficult was to 'un-teach' them some of the wrong lessons they had learned in the Arab-Jewish war. In that campaign armoured cars had perforce to be used as tanks. Since the Jews had few anti-tank weapons this had not mattered, but against an enemy with modern equipment it would be suicidal to repeat the performance. Both officers and men were slow to appreciate this and still slower to learn the vital necessity of good wireless operating in an armoured car unit. This was the more surprising since the Arab soldier is good at wireless.

Despite the disappointments and irritations, I learned that building a regiment is like making a garden. There is the same anticipation in preparing the ground and sowing the seed ; the disappointments when growth is slow, or in some cases, when choice plants die without flowering ; the fury when one's fool dog buries its bone among the cherished carnations ; and the final satisfaction when the whole place is in bloom.

An armoured car regiment in desert country is a most satisfying unit in which to serve. Jordan's desert is more interesting than most, and the 'going' is excellent on the whole. The Beduin soldiers love the desert which is their home, and are at their happiest and best when serving in it. It is true that a diet of bully and biscuits tires even the Beduin stomach after a few weeks, but they rarely complained. It was only the life in barracks which bored us after a time.

If required to list the good points of the Beduin soldier, I should put them as these: good humour, zest, keenness, loyalty, endurance, and toughness. All good military qualities. There is the reverse side, of course. Lack of education contributes to a lack of appreciation of a sufficiently high standard ; the mediocre is too easily accepted as the superlative. There is, too, conceit, intrigue, and hot temper ; all weaknesses in the Arab character. But never once did I appeal to my men for a special effort without receiving in return all that they had to give. They were proud of themselves, their Army, and their Arab traditions, and they never let me down.

In their tents in the desert, the life of the Beduin has not changed very greatly since the days when Doughty wrote the words quoted at the head of this article. Yet the Beduin soldier today has shown that given good equipment and training he will make as good a soldier as any. It required Glubb Pasha to prove this. In return, the Beduin of the Legion have repaid his faith with an affection and loyalty which is a constant encouragement to the British officers who serve with them.

Visiting officers often asked me how capable the Beduin were in handling modern equipment. One could only reply that they handled it well enough, but maintained it not so well, but that increasing education and training might overcome this defect. Sometimes I thought that the polite silence which followed my answer masked considerable incredulity. But the final test came in January this year when the whole Regiment was deployed in an operational role in north-east Jordan.

We were forced to operate in the 'Lava Belt', some of the most difficult country imaginable for wheeled vehicles. We were 150 kilometres from our base, and squadrons were spread out on a frontage of over 100 kilometres. In the course of the operations, which lasted over a fortnight, every one of the 200 vehicles we had with us travelled 2,000 kilometres or more. Not once in the whole period did squadrons lose touch with Regimental Headquarters, nor did the Regimental 'rear link' lose touch with base. What is even more remarkable is that every single vehicle returned under its own power; not one required to be towed. It was all the proof I required!

Yet I think my salient memory of the Legion will be its comradeship. The Beduin is probably the last real democrat. He gives respect where it is due, but he is never servile. If he thinks you are being unfair, he will say so in no uncertain terms. My second-in-command never hesitated to tell me if he thought I was making a wrong decision. And of course they had always the final recourse to the age-old Arab habit of ignoring any regulation they thought unworkable or unjust. The funny thing is that they were usually right.

Illiteracy is the main problem. The enlistment of young boys of 16 and educating them for a year before posting them to units is now being tried with success. There is a great thirst for education in the Middle East, and it is not something which can be held up. Nevertheless education as we westerners understand it is not always the answer. The solution may lie in teaching the three R's, and then in encouraging the men to broaden their minds by offering them the right literature to read. The tragedy is that there is little of the latter in Arabia—only trashy magazines and newspapers which are often seditious. Like a child, the Arab's mind is receptive to anything that is put into it. The great challenge to the Legion today is to produce the right sort of ideas, but it is not always easy and requires a great deal of money.

Three years with the Beduin soldiers have taught me that three qualities are required of anyone who intends to serve with them. They are patience, a sense of humour, and approachability. One must be prepared to 'make haste slowly', remembering that one's men are being pitchforked into modern life after a childhood spent in much the same way as Isaac's. One must always be ready to laugh because the Beduin will laugh at the same things too, and they quickly see through the pompous or ridiculous. Finally one must never be so busy that one cannot find the time to listen to their often trivial complaints, or to lunch with one's men in their black tents. Hospitality is sacred to the Arabs, and even more so to the Beduin. A man may spend his last penny to feast you, but he feels it is worth it if you attend.

Perhaps my liveliest memory of the Beduin soldier will be this one. A driver who had driven my caravan for two years suddenly went absent. He was posted as a deserter, but eventually returned with the story that as his father had died he had had to look after the herds until some other arrangement could be made. He was put in the guardroom under close arrest.

A few days later in the course of a camp inspection I visited the guardroom, accompanied by my second-in-command and R.S.M. Ali and some other criminal were brewing tea on a Primus. Ali greeted me with his usual cordiality and showed no signs of embarrassment regarding his unfortunate situation. "Ya Sidi," he said, "honour us by taking a cup of tea?" No one appearing to find anything extraordinary in the proposition, we all squatted solemnly on the floor and drank a cup of syrupy Beduin tea. Ali was delighted and took his punishment next day with equanimity!

That and other memories will keep the Arab Legion alive for me when my days with it have ended. Life with the Beduin soldier can be frustrating, irritating, or exhilarating—but it can never be dull! And I, for one, have enjoyed it to the full.



## THE IMPORTANCE OF PATROLS IN NUCLEAR WARFARE

By BRIGADIER M. R. ROBERTS, D.S.O.

THERE can be no doubt at all that the advent of the atomic weapon will enforce both on attackers and defenders a dispersion far greater than has ever before been practised on European battlefields. Many distinguished officers have drawn attention to this fact in the last few months, and a short article on the development of area defence and its relation to atomic age warfare appeared in the R.U.S.I. JOURNAL for February. My object now is to discuss the impact of this very wide dispersion on minor tactics and the training of the soldier.

First let me state what appears to be an incontrovertible fact, that the greater the dispersion, the greater becomes the importance of minor tactics and the greater the need for junior leaders of superlative skill.

From the days of General Braddock we have suffered initial disaster in wars against supposedly inferior enemies who were skilled in fighting in fast-moving, widely dispersed, small columns. In modern and comparatively modern times, the Boer commandoes had us in dire distress, and in 1940 and 1941 we had no answer to the fast-moving, deep-penetrating Panzer columns or, later, the infiltration of the Japanese infantryman.

True, in between, we had our successes. We had them in the Peninsular War, thanks to the development of the light infantry tactics by the 'Sepoy General' as he was sometimes called in his earlier days; in the Crimea, because both sides used to invite their ladies to come out and watch the impending battles; in the Kaiser's war, because the Germans believed in the overwhelming mass and we had learned, from the Boer War, the true power of the rifle skilfully handled by comparatively small numbers.

It might add force to my contention to point out that near disaster turned to success in the Boer War when the command was entrusted to a leader skilled in the handling of deep-penetrating, small columns and who was perhaps the greatest of many skilful generals who fought on the North-West Frontier of India. That these facts had not been properly appreciated is shown by the remark made to me by a very senior general in 1940, "You want to forget all about the things you did on the Frontier."

Enough of the past. Let us now return to the future. However good the corps and army commanders' plan may be, its success in our atomic age may depend on the ability of company, platoon, and even section commanders to get to a given point by a given time and join up with other similar sub-units on the battlefield for an attack, by night for preference, on one or more of the enemy's widely dispersed defended posts in turn and destroy them piecemeal.

There is nothing new in this concept of attack, for it was practised in Burma, first by the Japanese and then by ourselves, since the country made it necessary. The object of the defence was not to stop all the gaps, but to entice the attacker into a good 'killing ground' in the heart of his defended area. The object of the attacker was to discover, before his attack, the enemy's dispositions with such accuracy that he could avoid the traps and demolish the enemy's strongpoints one by one by attacking them from the most unexpected direction—which usually meant the most difficult approach.

From the above it must be obvious that the first requisite is patrol work of the highest order. The degree of skill acquired by the Long Range Desert Group in the Western Desert, and of the forces in Burma after 18 months of learning the hard way, is the standard to be aimed at. On this subject I am going to quote two remarks made to me; one by a sapper general, the other by an infantry battalion commander who later became a lieutenant-general after commanding a very famous division. His battalion, incidentally, was, in 1937, thought by many to be the best trained in India, which at that time probably meant the best in the world.

The sapper general's remark was, "You can make an intelligent chap by intensive training into a reasonably good field engineer in six months, but you will be lucky to make him into a first-class infantry soldier in 18, and an infantry soldier is no damn good unless he is first-class. On patrol, a bad one is a menace to his comrades." The other remark was to the effect that provided every section and platoon commander in a battalion could successfully carry out a reconnaissance or fighting patrol task, the battalion could do anything that is required of it in war. It is not within the scope of this article to go into discussion of these statements, but anyone who finds himself in disagreement with them at sight will, I think, after thinking them out carefully, agree that there is a tremendous amount of truth in both of them.

It always helps, when one comes to training, to be sure from the outset what standard you wish to achieve. I believe it to be this; that any platoon commander, given a map reference of a point some 15 miles, or a normal day's march, away, and about two hours' daylight for preliminary reconnaissance, should be able to get his platoon there by dawn the following morning, even though all roads and tracks leading to it are susceptible to being watched by the enemy. This was the standard laid down by the infantry commander I have already mentioned, which he achieved with his battalion, and in two years I very nearly achieved in mine.

The result became manifest just before the 1939-45 War in manoeuvres, when in an inter-battalion exercise the battalion commanded by the senior major succeeded in raiding a dump, protected by its opposing battalion, just after sundown, with the whole battalion less a few small detachments, and getting away without its opponents being aware that the raid had taken place. The small detachment and a few administrative personnel at the dump were caught completely by surprise. The telephone lines to battalion headquarters had been cut, a visual relay point through which helio and lamp signals had to pass between the dump and the headquarters of the covering force was stalked, its garrison 'bayoneted,' and a blanket dropped over the signal lamp a few minutes before zero hour for the attack. The exercise, intended to last 36 hours, lasted less than 12. It began at 0600 hours in the morning and by 1600 hours that afternoon, the attacking battalion commander had an accurate map of every 'enemy' post and the position of his reserve. This was in hill country with a certain amount of scrub jungle but no forest. A year or so later the wireless set would have been the attackers' first objective.

Later, during the war, a battalion of the regiment, commanded by the officer who had been adjutant during the event just described, and officered very largely from the same battalion, achieved on several occasions quite brilliant results against that redoubtable exponent of infiltration and attacks from behind, the Japanese. That battalion commander was commanding a brigade before he was 35.

The only way to get really efficient at this patrol game is by constant competitive practice. It is only by pitting one's wits against another's over and over again that

one begins to know what one can 'hope to get away with,' and how to act in emergency. To have to think something up quickly, when a false move probably means death, is a desperate situation to be in unless one has a prepared mind and great confidence, and that is a situation which will often face the small party moving independently into an area infested with enemy.

What a common sight it is to see a patrol, which has adopted the 'correct' formation for the type of country to be traversed, 'bumming along' until something happens!

Anyone who was in Burma knows how difficult it was to get identifications of Japanese in the early days during their deep and rapid infiltrations. The reason was simply that they had ingrained in them the precept that when you moved you moved fast, that you were always covered, and that you never went out of sight of the covering party. Any man that was hit was got away alive or dead, complete with the diary he usually carried and his pay book!

No adage has had more lip service paid to it than the time-honoured 'time spent in reconnaissance is seldom wasted.' It sounds good and everyone believes it, but the number of people who have a realistic idea of how to set about it is very, very small. I speak from experience!

That brings me to the next point—the collection of knowledge about the enemy's widely-dispersed, atomic defensive system. I am fortunate in being able to describe *one* way that works. It was employed by the division in which I served, which never put a foot wrong and helped to inflict the first major defeat on the Japanese in Burma. It worked against a confident and, up to then, consistently victorious enemy.

Well in advance of the operation—it might be weeks in the case of a large scale one—the divisional commander gave his brigade commanders a very brief outline of his proposed plan and their part in it. Brigade commanders in turn did the same with battalion commanders and the procedure was repeated down to companies, whose commanders gave their platoons their tasks. This was the stage at which the information really began to come in, from patrols operating up to three and four miles behind the enemy forward defences—the exact location of enemy posts, the best line of approach, and the time taken to get to a suitable forming-up place for attack. From that information the building up of the final plan and the fixing of zero hour, based on the time required by the company with furthest to go (in point of time), was not a very difficult matter. Then, when everyone knew his own task, the divisional order would be issued and just before zero hour everyone was put into the picture, and only at this stage would the company commander become aware that it was something bigger than a 'battalion show.'

The procedure outlined was for dealing with a well-established position of widely dispersed but mutually supporting defended localities. The first time I saw it put into practice, although I expected a lot, I was amazed at the amount of detailed information that came in. I had made my troops, in training, spend so much time on collecting information that I had on one occasion been told that I was 'overdoing the patrolling.' One is not often able to be glad in retrospect of a slight reprimand! In fact, so much information came in, that the Corps senior 'I' Staff Officer on two occasions came to see me as he suspected that I was being led up the garden path. However, it all turned out to be good sound stuff which I had good cause to be sure of, having been shown such things as tree snipers sitting in their trees quite

unsuspectingly scratching themselves and Japanese feeding in their 'cookhouse' in what they thought was a defiladed ravine behind a forward defended post.

One of the greatest difficulties of realistic and adequate training in patrol work is that it tends to be looked on as 'elementary' stuff on which recruits are brought up. Commanding officers are almost offended if asked whether their junior leaders can take out a patrol, and yet it is the most difficult single operation of war, requiring continual practice to produce anything like perfection. And perfection is the only acceptable standard.

Another difficulty is that, in manœuvres, patrolling is very difficult to umpire and there is a tendency among umpires to rule out highly skilled or daring patrol work on the grounds that 'it couldn't have been done if there had been bullets flying.' A patrol that has been seen is often adjudged to have been dealt with, and yet a skilful patrol leader can achieve a lot by allowing part of his patrol to be seen at the right place.

These difficulties in training must be overcome, because the infantry attack of the atomic age is probably going to be composed of a large number of fighting patrols, each timed to reach a certain point at a given time, each one entirely self contained from the time it moves off until it arrives at the point where it is due to fall on the enemy post which is its objective, in company with one or more other patrols which have got there by a different route.

Up to now nothing has been said about armour which will be required to be up with the infantry when the assault opens, but which, for obvious reasons, may have to start its approach long after the infantry. Its route, too, must be pre-selected, and, at some stage in the reconnaissance period, representatives of the armoured units must accompany the infantry patrols. If the infantry are to be taken forward in armoured vehicles the carrying unit must be 'in' on reconnaissance from a very early stage. It follows that armoured units, whether fighting or carrying, must be trained to work with infantry patrols.

I believe that a very considerable portion of the collective training period should be devoted to patrol exercises up to brigade level, even though it takes all the officers and senior non-commissioned officers of another brigade to umpire them. Umpiring is, after all, very fine training. Having done that, let the divisional, corps, or army manœuvres that follow be framed so that deep and skilled patrol work is an essential part of them—then the *men* will be interested as well as commanders and staff!



## TO ARM OR NOT TO ARM?

By COMMANDER L. J. SHARMAN, R.D., R.N.R.

**T**O arm or not to arm merchant ships in wartime? That is the question. It might seem obvious that a ship sailing in waters infested with enemy forces should carry some sort of armament as a means of defence against attack. Certainly a means of defence must be provided, but it is open to question whether fitting merchant ships with guns is the most practical or desirable method.

In wartime, shipping resources are always stretched to the limit. Ships are required to carry the cargoes outwards and homewards necessary to maintain the economic life of the country. Some are required for the transport of troops, others to provide the Fleet Train. Every ton of cargo a ship can carry is therefore valuable and anything which tends to reduce the carrying capacity of a ship is to be deprecated.

A merchant ship is designed to carry cargo as economically as possible, and this applies as much, if not more so, in wartime as in peacetime. The weight of armament, stiffening, extra ballast, etc., fitted in a merchant ship means a corresponding reduction in the weight of cargo that ship can carry. It is possibly not generally realized to what extent the cargo lift of a ship is reduced in consequence of armament carried. From the records of my present ship, a cargo carrier of approximately 10,500 tons dead-weight capacity, the weight of armament, permanent ballast, etc., fitted in the last war was over 400 tons. If we assume a loss of cargo-carrying capacity of this figure to, say, every ship in a 50-ship convoy, it represents a reduction of 20,000 tons of cargo per convoy, equivalent to two ships' cargoes. A reduction of this order needs to be fully justified before being accepted, and although records have not been consulted, it is doubtful if the armament supplied to merchant ships in the last war was responsible for preventing two ships per convoy being sunk.

From past history it is apparent that the most effective defence of merchant shipping is obtained by the exercise of naval control of shipping in the form of sailing ships in convoys adequately protected by escorts. The menaces with which convoys are likely to be faced in the future, i.e. fast submarines firing long-range homing torpedoes, fast, high-flying bombing aircraft, fast, heavily armed cruisers, etc., will all call for modern techniques of detection and attack by highly skilled personnel using up-to-date devices and weapons. These are not likely to be found in merchant ships. In fact, the type of armament one envisages being fitted to merchant ships, judging by past experience, will be of doubtful use or ornament. I do not think there were many successful engagements in the 1939-45 War between merchant ships and enemy warships. It is laid down by international law that a merchant ship is entitled to use force to resist capture on the high seas, but as practically every warship is much more heavily armed than any merchant ship, any attempt to use armament usually results in unnecessary loss of life.

In order to equip merchant ships with guns, a considerable amount of national resources is required. Ships have to be stiffened, extra ballast carried in some cases, etc., all of which take time, money, and materials. The cost of modern armaments being so high nowadays, any saving or streamlining in expenditure on defence would no doubt be welcomed. The saving consequent on not providing arms for merchant ships could more profitably be expended on more and better escort vessels. Even if the saving effected resulted only in the provision of one or two extra escorts, their potential fighting value would probably far outweigh that of all armament likely to

be fitted in merchant ships. Furthermore, the guns in merchant ships require extra ratings to the normal crew complement to man them. These ratings are drawn from the fighting Services. They could probably be more usefully employed in their own Services.

One argument that is usually advanced in favour of arming the Merchant Navy is the effect on morale. It is without doubt very comforting to have a weapon with which to hit back at an attacker, but if one has little confidence in the efficacy of the weapon it is hardly likely to improve morale. It was very heartening while serving in *H.M.S. Nelson* during the war to look down on the nine 16-inch 'stovepipes,' as they were affectionately called, not to mention the numerous other useful weapons. One felt elated at the prospect of an engagement with the enemy. There was not quite the same sense of well-being in an armed merchant cruiser in the early days of the war in looking at vintage type 6-inch guns, which in any case could not attain their maximum elevation, and one solitary, old-fashioned A.A. gun. I do not recall any raising of morale in that ship's company when they realized the limitations of their weapons. If Merchant Navy personnel were given some idea of the methods and techniques of modern defence measures in convoys, and were given to understand that the deprivation of their armament would provide more and better escorts, their morale would doubtless respond. This could be explained and emphasized at Merchant Navy defence courses. Of course, if the only reason for providing guns is for the joy of making a bang to improve one's feelings, a half-dozen rifles might serve the purpose and be much cheaper.

It may be felt that if merchant ships are not to be armed there should be no need for defence courses for Merchant Navy personnel. On the contrary, there is a very real need for them, but on different lines. Instead of training men in the use of obsolete weapons, a thorough training in damage control and passive defence would be of more value. A knowledge of fire-fighting methods and the effects of damage on the ship's stability, etc., would be of far greater advantage in the unfortunate event of a ship being hit than the knowledge of how to use a weapon of doubtful value.

To sum up, the main arguments against arming merchant ships are :—

1. The loss of deadweight capacity at a time when it is of vital importance to be able to carry as much cargo as possible.
  2. The expenditure of considerable national resources which could be utilized in a more profitable manner.
  3. The unnecessary wastage of manpower to man ineffective weapons.
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## GOLD MEDAL AND TRENCH GASCOIGNE PRIZE ESSAY, 1954

By WING COMMANDER P. DE L. LE CHEMINANT, R.A.F.

**"Rearmament and the maintenance of large land, sea, and air forces during a cold war cause national bankruptcy. Our economic position at present prohibits the support of large armed forces and, consequently, dominates our strategic policy. Discuss what strategy, in your view, should be adopted in the circumstances and what type of force, bearing in mind the need for efficiency and balance, should be maintained to implement it."**

### THE BASIS OF BRITISH STRATEGY

IT is often claimed today that national strategy is outmoded, and that the only practical course for the West is the subordination of national strategy to international strategy. Whilst this is true in the sense that the unity of the western Powers and the adoption by them of a common policy and strategy is essential, it ignores the means by which this accord should be reached. Paradoxically enough, it is only through the survival of national policy and strategy, together with goodwill and the resolve to compromise, that a truly international strategy can be evolved. The alternative is complete acceptance of the policy and strategy of the strongest Power. It is no criticism of America to say that this would be undesirable, for no country has a monopoly of wisdom. Whilst bearing in mind the paramount need for the unity and common purpose of the West, an attempt is therefore made in this paper to set out what strategy and pattern of forces should be adopted by this Country.

Grand strategy, in peace, has been defined as "the furthering of national policy." From the acceptance of that definition it follows that British strategy will be largely governed by national policy and that, before considering what strategy should be adopted, it is first necessary to have British aims and policy clearly in mind. The three cardinal aims which fashion our policy, and hence our strategy, may be simply stated as the prevention of war, the maintenance of our economic structure, and the maintenance of our position as a world Power.

It has been our traditional policy to seek to prevent war. The sanity of this course was never more evident than today when, with the advent of weapons of mass destruction, it is abundantly clear that unrestricted war could smash the fabric of civilization. In between the world wars we sought to preserve peace by reason and disarmament; since the last war, after an abortive period during which we seemed in danger of repeating this mistake, it has been our policy to negotiate from strength. In pursuance of this policy we have set ourselves to resist the spread of Russian imperialism and have accepted the need to maintain armed forces on a large scale.

In building up our armed forces we have so far succeeded in maintaining an economic balance and a tolerable standard of living. This economic balance is, however, most precarious and, if it is not maintained, mass unemployment, poverty, and discontent—the very conditions under which Communism thrives—will overtake this Country, thus leading to a fatal weakening of our power to resist. There is a danger that this upsetting of the economic balance might come about by seeking to maintain a level of armaments which we cannot afford.

Apart from prestige and the compelling need for economic survival, Great Britain has other good reasons for seeking to maintain her position as a great Power. This Country has heavy responsibilities on behalf of the colonial peoples, and the successful discharge of these imperial commitments is a powerful factor in the preservation of peace. Additionally, our example and counsel in the affairs of the world would be of no account if we came to be regarded as a colonial Power of some 50,000,000 people, and can only be of decisive influence if we maintain our unique position at the head of the Commonwealth.

Our national policy may therefore be defined as 'the prevention of war, whilst maintaining our economic stability and our position as a world Power.' It is evident, however, that this policy can only be an interim one. The negative purpose of preventing war cannot be considered as more than a first step in the rationalization of human relationships, and our eventual aim must be to bring about a real and lasting peace through the relaxation of world tension. To reach this ultimate goal may take many years, perhaps generations. Real 'peaceful co-existence'—not the distorted meaning that the Communists have given to the words—may well prove an acceptable stage on the journey. We have no mandate to attempt the overthrow of Communism in sovereign states such as Russia or China. To make it clear that such was our intention, and to attempt to do so in present world conditions, would be to adopt a policy as inimical to our interests as that of 'unconditional surrender' proved to be during the 1939-45 War. What we have every right to do, and what is essential, is firstly, to prevent the further spread of Communism and, secondly, to drive it back within its frontiers. The proper course to be taken once this has been achieved can only be judged when the time comes. The philosophy of Communism has the seeds of its own corruption within it, and history encourages the hope that the system, rooted in the mire of evil, will wither away and perish.

Whatever methods may prove necessary in the long term it is, however, the 'first step' which is of importance at the moment, and our strategy must be fashioned with that in mind. The three major components of the national policy—the prevention of war, the maintenance of our economic stability, and the maintenance of our position as a world Power—together set the framework within which our strategy must be evolved. Of these, the economic factor must be accepted as fixed and dominant. If we are to remain solvent as a nation there is clearly a limit to the amount of money that can be allocated to defence. Without going into details of figures it is broadly true to say that we have reached the limit of our capabilities in that direction, and that any increase of military expenditure in one field must be offset by corresponding decreases in another. Indeed, so far from any increased expenditure being likely, it is clear that the Chancellor has every intention of making a reduction in the Defence Vote.

In considering our strategy, we are face to face with several unpalatable facts, first amongst which on the military side is that we are now only the third strongest world Power and are no match for Russia alone. Secondly, we are committed by both choice and circumstance to the American camp. As stated earlier, this does not mean that there is for us no longer such a thing as national strategy. What it does mean is that we must accept some degree of self-imposed limitation in our freedom to decide our strategy in just the same way as we accept the loss of a degree of personal liberty in modern civilization. Whilst, therefore, it would be patently unsound to adopt a strategy and pattern of forces which did not dovetail in with that of America and, to a lesser extent, that of the other western Powers, we need



not necessarily follow American policy slavishly and uncritically. If, however, our strategy is to be realistic and effective, and is to help in moulding the common strategy of the West, it must take due account of that of the United States as our main ally in any war against Russia.

To prevent war and maintain our world position is primarily a political task in which the function of the armed forces is to add due weight and realism to the utterances and proposals of statesmen. This is a most important function because, since the war, military power has in increasing measure become the yardstick of international respect and consequence. It is fundamental to our strategy that our military power must be actual rather than potential if our counsels in the affairs of the world are to have due effect in preventing war. It is also fundamental to our strategy that this military power must be sufficient not only to play a part in deterring Russia from making war, but must be so constituted that it is also capable of helping to contain Communism in the cold war. The degree to which our armed forces are judged fit to perform these tasks will very largely be the measure of our authority and influence as a world Power.

From these considerations the basic requirements of British strategy emerge. It must take account of that of the United States and must command forces capable of playing their part in deterring Russia from engaging in total war, of protecting our world-wide interests, and of helping to fight such limited wars as may be necessary to halt the spread of Communism. Before deciding what strategy best meets these requirements it is necessary to assess the Russian threat, to determine what war with Russia would entail, and to examine the strategy of the United States.

#### THE RUSSIAN THREAT

Although China has become a world Power overnight and may well prove a menace in cold war, only Russia can threaten our survival, and it is therefore the Russian threat which is vital to our strategy. Before considering Russian aims and policies it is convenient to state the military threat in general terms. It is not necessary to have precise intelligence or to make a close examination of conflicting public utterances in order to do this, as a few known facts and the deductions that may be drawn from them serve to show that it is of the first magnitude. We are faced by a population of some 200,000,000, rich in natural resources, with unlimited cheap labour, and geared to a programme of industrialization and rearmament. Russia has the most powerful army in the world and, excepting the Chinese, the biggest reserves of manpower. She ended the last war with an air force of great numerical strength and proved effectiveness in the tactical role but with virtually no experience of strategic bombing and, in general terms, of considerably inferior quality to that of the West. The enormous progress that has been made in the technical field has been demonstrated in startling fashion by the MIG-15, and there is too much evidence to the contrary to doubt that the Russian Air Force is now very large indeed. A significant fact in considering the Russian air potential, however, is that to date there is no indication of her strategic force being armed with any types other than the piston-engined TU4—the Russian copy of the American B.29—an aircraft of inferior performance by modern standards. Even on the assumption that long-range jet bombers are in production it would seem reasonable to assume that some time—possibly years—will elapse before they are in service in significant numbers. On the naval side we know from the recent Admiralty announcement that in two or three years' time the Russian Navy is expected to include 500 submarines and 30 cruisers. It is in the crucial matter of thermo-nuclear capability that available facts

are scarcest and conjecture has the biggest sway. A fair and cautious assessment would seem to be that Russia's knowledge and store of nuclear weapons are both less than those of the West, but that the disparity may not be very great and need not necessarily be permanent.

There can be no doubt that the Russian aim is world domination. What is questionable is whether the vast scale of her military preparations show that she is planning once more to plunge the world into war. On the face of it it would seem that this must be so. It is argued that Russia must appreciate that she is in no danger of attack from the peace-loving democracies, that she alone is responsible for the present state of world tension, and that, in any event, her scale of armaments far exceeds what would be justified on grounds of defence. To arrive at this conclusion is to overlook two important factors. The first is that throughout history Russia has been obsessed with a not unreasonable fear of invasion. This fear, of which two recent examples were the Russo-German Pact of 1939 and Stalin's insistence at Teheran that the Allied effort should be in western Europe and not in the Balkans, has led Russia to seek to surround her territory with Soviet-dominated spheres of influence. This traditional fear, the knowledge that Communism is anathema to the West, and bitter memories of the attempts that were made to strangle the revolution at its birth, have all gone to make up the pathological suspicion of the West which is such a marked characteristic of the Russian rulers. The second factor is that, with the advent of the hydrogen bomb, it is no longer possible to win a war. Victory would, in the words of Wellington, be truly "the greatest tragedy in the world except defeat." Even if the Russian leaders think that they could defeat the Allies, they must know that the cost to them in terms of devastation of their own country would be a prohibitive price to pay for victory.

It is undoubtedly true that Russia's vast armaments cannot entirely be accounted for by her fear of attack by the western Powers. Her military preparations may, however, be partly explained in other ways without viewing them as deliberate preliminaries to war. It is at least possible that she is intentionally trying to force large-scale rearmament on the Allies with the object of bringing about the economic collapse of the West, or at least so straining its economy that a fruitful field would be opened up for Communist exploitation. Equally, she may wish to maintain a powerful military machine so that she can strike quickly if, through the Allies relaxing their vigilance and military preparedness, she should ever find the balance of power overwhelmingly in her favour. This seems highly probable, for the Russian is an oriental and his aim is not qualified by time. The Russian leaders may well believe that it is in the nature of democracy to ignore threats which do not materialize and to avoid facing facts which are unpalatable and bad for business. Whilst, therefore, in the short term, they may hope for the economic collapse of the West as we strain our resources to rearm, they may equally, in the long term, have reason to hope that the cycle of events will cause us to disarm and leave the West weak and ripe for conquest.

On balance, however, it would seem probable that Russia will attempt to achieve her aim of world domination without resort to war. We must expect Russia to exploit the two immensely powerful factors which work to her advantage—the world-wide appeal of theoretical Communism to idealists, power seekers, and the under privileged, and the nationalism which is dominant in Asia and the Middle East and which is gaining premature momentum in Africa. The exploitation of these factors is likely to lead to further limited wars like those in Korea, Malaya, and

Indo-China, by means of which, at no cost to herself, Russia is able to strain the economy and tie down and disperse the armed forces of the West. We may conclude, therefore, that the Russian threat is not primarily one of world war, but rather that it will be her policy to achieve world domination by constant cold war pressure, both military and political, aimed at the unity and economic balance of the West. We should not, however, discount the possibility that Russia might risk the consequences of world war should she ever become convinced that a cheap and quick victory was possible.

#### THE CHARACTERISTICS OF A WAR WITH RUSSIA

Although in our assessment of the Russian threat we have concluded that world war is unlikely, this will only be true for as long as the West is prepared, and our pattern of forces must be fashioned with the possibility of war with Russia in mind. It is, therefore, necessary to establish the characteristics of such a war. Because there is clearly no question of Britain or America instigating war, it would only come about either as a deliberate Russian attack or as the result of an uncontrollable chain reaction set off by some local war. However it started, Europe would be the decisive theatre. Russia would undoubtedly attempt to seize the initiative and there is no reason to doubt that she would use nuclear weapons from the outset. The argument is sometimes advanced that, because Russia has a large advantage over the West in both manpower and conventional weapons, she would seek to avoid nuclear war. If this were so, and Russia started a war in which both sides refrained from using nuclear weapons, it is impossible to doubt that her armies would be able to conquer the whole of the continent of Europe. It is equally certain that she could establish air superiority over this Country and the English Channel. Once this was done, England could not long survive. Russia would then stand mistress of Europe, and America would have lost those very air bases which give her a measure of advantage over Russia in nuclear war. It is unthinkable that the Allies would allow this pattern to unfold; it is equally unrealistic to think that they could prevent it without recourse to nuclear weapons. As both sides would be aware of this inevitable outcome it seems quite clear that no limitations would be observed and that nuclear weapons would be used from the outset.

Any consideration of what might happen in a war with Russia is dominated by the potentialities of the hydrogen bomb. There is no need to seek to go into technical niceties concerning the power of this weapon. For practical purposes one may accept the broad yard-stick of the American Senator who claimed that one hydrogen bomb would suffice to devastate any city in the world. It does not matter if there should be an element of exaggeration in this claim; there can be no doubt that one hydrogen bomb is capable of so damaging a city that its facilities, whether they be those of a port, industrial centre, or communications centre, would no longer be of use in the prosecution of the war.

If it is accepted that nuclear weapons would be used, it follows that the strategic air offensive would be the dominant feature of another war. As Sir Winston Churchill has said, "for good or ill, air mastery is today the supreme expression of military power, and fleets and armies, however necessary, must accept a subordinate rank." So much is clear and, though it is not possible to forecast the course of another war, certain other probabilities can be established and propositions advanced. It is probable that Russia, concurrently with her nuclear offensive, would launch an all-out attack in Europe and at sea. It is also probable that, in the long run, the battle at sea would be won, but a classic land advance into Russia does not seem either a

practical possibility or a sound strategic concept. It is to be hoped that our forces on the Continent would be able to hold the Russian advance until the Allied strategic air offensive had had time to develop and take effect, but to pour large reinforcements into Europe and seek a decision by the mass use of armies would be to fight the war on the most disadvantageous terms possible, and thus to court disaster. Such a course could only succeed if the strategic air offensive had so disrupted the supply system of the Russian armies that they were no longer able to offer effective resistance. In that event the war would already have been won, and the army's advance would be administrative rather than operational, and would have as its object the prevention of famine and disease in the satellite countries and in a Russia already shattered and beaten by strategic air power. The first proposition is, therefore, that although the war will be fought by land, at sea, and in the air, it is only the air which can gain a decision against Russia. To those who maintain that air power cannot win a war, it is only possible to say that there is no other means open to us and to advance the further proposition that, if Russia is not defeated by the time the West has exhausted its stock of nuclear weapons, Europe and this Country are lost to the free world.

#### AMERICAN STRATEGY

As in any democracy, the dominant aim of American policy is the prevention of war. The strategy which she has evolved rests primarily on the deterrent value of her strategic air command. She has succeeded in building up a striking force which, operating from a global network of strategic air bases, is capable of wreaking terrible havoc on the Soviet Union. In doing this she has had two purposes; firstly the hope that the knowledge of the devastation that could be inflicted on their homeland will deter the Russians from going to war and, secondly, the forging of a weapon which, if it fails as a deterrent, may prove decisive in fighting the war to a successful conclusion.

America has, at the same time, not neglected other measures in the development of her strategy. Whilst she realizes that, in war, the only answer to Russian manpower lies in the continued technical superiority of the West and has therefore attached the greatest importance to the development of her strategic air arm, she is well aware of the limitations of this weapon in peace-time. American intervention in Korea and the presence of her troops in western Europe are evidence both of her understanding of the need for conventional forces in peace and of her determination to use them to contain Communism within its present frontiers in those areas where she considers it vital to do so.

America was far-sighted enough immediately after the last war to realize that only her financial aid could rehabilitate western Europe and so insulate it against the spread of Communism from within. This she gave generously, and has since continued to strengthen the countries concerned with military aid. This policy, together with her realization of the need for troops on the ground in western Europe both for cold war purposes and to resist a Russian land attack in the event of war, has resulted in the building up and welding together of the armed forces of the North Atlantic Treaty Organization. There are at present indications that a similar organization may, with American initiative, be set up for the defence of South-East Asia.

#### BRITISH STRATEGY

It has been established that our strategy should be designed to prevent Communist expansion, should play a part in deterring the Russians from having resort to war, and should take account of the strategy of the United States. There



are two types of Communist expansion, that by the covert means of undermining a government from within, and that of open aggression with armed forces. The first type cannot directly be resisted by military means, and it is expansion of the second category—that sought through open attack by Communist armed forces—which our strategy must be designed to frustrate. It is sometimes maintained that this type of aggression could be prevented by the so-called 'peripheral strategy' which virtually dispenses with troops on the ground and relies on the effectiveness of a warning to the Communists that any aggression would be met with instant retaliation by a strategic air force armed with nuclear weapons. This hypothesis does not bear examination. Retaliation could in practice never be 'instant.' It would be necessary to obtain incontrovertible evidence that aggression had in fact taken place, there would have to be consultation and agreement between Allies that the aggression was such as to justify the extreme step of unleashing nuclear warfare (which would not in any event be one-sided), and there might well be many borderline cases in which agreement could not be reached. For example, a change of regime in Yugoslavia followed by an invitation to the Russians to send troops into that country would, if acted upon, represent Communist expansion but not aggression, and 'instant' retaliation could not be justified. Even if aggression was so closely defined in the ultimatum as to make this type of aggression too dangerous, there would be nothing to prevent countries falling under Communist sway through internal subversion. There is in effect only one way of dealing with this type of attempted aggression—to meet force with force, as was done in Korea and is being done in Malaya. The prerequisite is that the force must be adequate for the task. If it is not, then a situation comparable to that which we have witnessed in Indo-China will arise and the choice will have to be made between conceding Communist gains or risking world war.

The second requirement of our strategy is that it should be such as to play a part in deterring the Russians from having resort to war. It must therefore aim to provide forces which are capable on the one hand of wreaking destruction on the Soviet Union and, on the other, of making a Russian attack insupportably expensive. The first of these two considerations is likely to carry the greatest weight with the Russians and, as the only effective deterrent in modern warfare is the hydrogen bomb, this requirement of our strategy automatically postulates that we must have the ability to wage nuclear warfare. As this question of whether or not we should build up a strategic bomber force is so vital and controversial when considering force requirements and inter-Service priorities, it is proposed to digress in order to consider it now.

The argument in favour rests primarily on two beliefs, firstly that another war will be a nuclear war, and secondly that in the near future only those countries capable of fighting a nuclear war will be entitled to the status of a great Power. The second of these beliefs contains a third, which is that this Country can only help to preserve peace so long as her counsel carries weight—so long, in fact, as she remains a great Power. To the school of thought that remains unconvinced that the next war will be fought with nuclear weapons it is only possible to restate the arguments put forward earlier in this paper. There is, however, another view which commands the closest attention and examination. This is to the effect that we cannot afford both a strong fleet and a large strategic air force and, because the defence of our sea communications is vital, we should therefore leave strategic air to the Americans. This view appeals to a maritime race and is supported by the lessons of history, but to surrender the power of the strategic air into Allied hands and to fall back on a primarily maritime strategy would be to make certain assumptions and to discount

certain factors which cannot lightly be ignored. The first assumption is that the war is likely to follow the traditional British pattern in so far as there will be time for this Country, behind the shield of the Royal Navy and Fighter Command, to develop its full military potential. This in turn assumes that the war is likely to be a long one in which the 500 Russian submarines will be a major threat, if not the main threat, to the survival of this Country. The third assumption is that America, in sole Allied possession of the strategic air weapon, will be able and willing to attack such targets as we may consider vital to our defence. The factors ignored are to some extent the corollary of these assumptions. The first is that the advent of the hydrogen bomb makes it at least possible that the war will be short, and that no opportunity will be given to build up a war potential or for submarine warfare to take full effect. The second factor is that all evidence and reasoning points to hydrogen bomb attack—equally deadly and far swifter in effect than that of the submarine—as being the first peril which this Nation would have to face and surmount. Thirdly, to keep such attacks to a minimum, it would not be possible to rely on Fighter Command alone; counter attack would be necessary against Russian bomber bases, nuclear stockpiles, and production centres. Without strategic bombers we should lack this vital weapon of defence and would have no redress if our Ally's priorities did not coincide with our own. The final factor ignored is that the strategic bomber, by attack on bases, may well prove one of the most effective and economical weapons against the submarine.

It would seem, therefore, that the ability to wage nuclear warfare, and thus the possession of a strategic bomber force, should be an essential part of our strategy. This is not to say that Bomber Command should necessarily be built up at the expense of the other Services, but only that the strategic bomber has a vital place in the line of battle.

Whilst the threat of nuclear bombardment will clearly have a greater deterrent effect than any other factor, we may hope that the knowledge that an advance across Europe would be met with strong and determined opposition will play a part in discouraging any Russian tendency to resort to war. The existence of strong N.A.T.O. forces on the continent in peace are an earnest of the unity of the West and of the common resolve to resist Russian aggression. The British element which we have offered to commit to Europe under the London Agreement, whilst contributing to the deterrent, also plays another less tangible role. It gives a lead and example to the other European members of N.A.T.O. and to those states which have not yet decided to join the alliance. Additionally, it goes some way towards diminishing the French fear of a resurgent Germany and is the proof that we identify ourselves with the fate of Europe. In the long term, German rearmament cannot be prevented and it is most important, both for the strategy of the West and for the future peace of Europe, that the rearmament of Western Germany should be carried out with adequate safeguards under the auspices of the western Powers.

We have decided that our strategy must provide forces capable of resisting Communist attack in cold war, and that we must contribute to the deterrent both by building up a bomber force capable of waging nuclear warfare and by maintaining the effectiveness of the forces which we have allocated to N.A.T.O. These requirements are in parallel with American strategy and do not conflict with it in any way. By building up our own strategic air force and by manufacturing our own nuclear weapons we will, however, be making more than a material contribution to the strategy of the West. By doing this we will retain our status as a great Power and our ability to act independently and, providing always that we have the backing of

the Commonwealth, will be in a position to influence American thought and actions. Therein will perhaps lie one of our most valuable contributions to the common cause.

### FORCE REQUIREMENTS

It is now necessary to decide what forces are required to implement the strategy which has been outlined in the last section of this paper. It has been argued that we need forces for two main purposes; to resist Communist attack in cold war and to build up a deterrent to global war. As it is most unlikely that, in war, we would be given time to mobilize our full resources, we therefore also need forces equipped and ready to fight should such a war come in spite of our efforts to the contrary. Thus we have a total requirement which, without detailed examination, we may quite safely assume would be beyond our national resources to meet in every particular. As it has been accepted that the economic factor is fixed and dominant, the assessment of our force requirements will clearly be a matter of priority and compromise.

In attempting to establish our priorities, we must go back to the dominant national aim; the prevention of war. The greatest single factor in preventing war is the deterrent, and it is therefore the forces which constitute the deterrent which must have first claim on our resources. In deciding the relative need for cold war forces and for those capable of fighting a global war, there are two main factors to bear in mind. The first is the appreciation of the Russian threat as not being primarily one of world war, and the second is that we may well have to fight another war with what is available to us at the outset. On the one hand, therefore, it would seem that priority should be given to those forces likely to be needed in limited wars, and on the other that we cannot afford to do this at the expense of our preparations for world war. It is submitted that the only answer to this conflict of requirements lies in backing the dictates of reason and commonsense that war is unlikely, and in acting accordingly. To do this is to accept the fact that we would not have the best pattern of armaments should war come, although the forces comprising the deterrent would go some way towards meeting our requirements.

Adherence to the primary aim of preventing war, and to the belief that it is Russian policy to use cold war methods to obtain her ends, thus gives us the order of priority which should govern the composition of our forces. The deterrent forces are first in importance, whilst those required for cold war take precedence over our hot war needs. With this in mind it is now necessary to attempt to establish the pattern of forces which will meet our requirements.

### NAVAL FORCES

Our existing naval forces, and more particularly those assigned to N.A.T.O., are contributing to the deterrent and would be essential to keep open our supply lines in war. For this purpose there is a requirement for carriers, escort vessels, mine-sweepers, and cruisers. There is no need to examine the claim which is sometimes advanced that land based air will in the future be able to take over the duties of the carrier and cruiser in this role. Whatever the truth of this contention may be so far as the future is concerned, the plain fact remains that at the present time the carrier and cruiser are indispensable.

The other method by which the Royal Navy could play an increased part in the deterrent would be by the employment of strike carriers, using aircraft armed with atomic bombs, to give added weight to the strategic air offensive. By using carriers in this role we would probably achieve greater penetration in certain parts of Russia and the increased element of surprise would add to the difficulties of the defence.

Protagonists of this idea maintain that by using the Navy as an extension of the strategic air we would be exploiting the flexibility of sea power and so following our traditional strategy. Whilst this may well be so, it is clearly no part of the normal function of maritime power to strike at strategic targets deep in the heart of a land mass. To do less, and confine the attacks to peripheral targets, would be an uneconomical use of the weapon and a failure to exploit its capacity for deep penetration. The high degree of vulnerability of the carrier, particularly to guided bombs, which seems probable in the future is also a factor to be considered, but the strongest argument against the formation of strike fleets is that the use of carriers in this role would divide the control of the strategic air offensive and would be a most uneconomical use of the air weapon. So far as this Country is concerned, however, the argument is academic, for strike carriers are undoubtedly an expensive luxury which we cannot afford.

In the limited wars which are likely to occur there will be a requirement, as Korea has shown, for balanced naval forces. Similarly, in cold war and for imperial policing there is a constantly recurring need for sea power, particularly for frigates and cruisers. We are fortunate that the pattern of naval forces required for deterrent and cold war purposes is the same as that which would be necessary for global war. There is thus no conflict, as there is in the other Services, between peace-time and war-time requirements, but only between what we would like to have and what we can afford. Provided that existing ships are replaced by new types, the present strength of the Royal Navy may be considered sufficient to meet our minimum cold war needs, but no one would argue that its strength would be adequate for war. There is a requirement for an all round expansion, especially in frigates, but whether or not this can be met can only be decided after reviewing the needs of all three Services in the light of the established priorities.

#### LAND FORCES

The British land forces which primarily add to the deterrent are those stationed in Germany. The main task of these divisions in war would be to slow down and, if possible, halt a Russian advance across Europe and so gain time for the strategic air offensive to develop and take effect. Additionally, the farther east the Russians can be held, the greater would be the advantage to the air defences of this Country. There is, therefore, no room for economy in ensuring the battle-worthiness of these forces and it is of very great importance that they should be equipped with the most modern weapons and should be trained for the type of warfare which they are likely to meet. Priorities must constantly be borne in mind however, and any tendency to overinsure by building up large land forces on the continent must be guarded against.

In the continuing cold war and the limited wars which are the most likely prospect, the primary need will be for land forces. For the type of trouble exemplified by Malaya and Kenya, infantry are the prime requirement, whilst in limited war, depending on the terrain, a balanced force of all arms is likely to be needed. At the risk of oversimplification, it can be said that in cold war we are likely to need large forces equipped to fairly light scales and that in hot war, in Europe at any rate, only forces equipped to the most modern and elaborate scales will be of any use. This conflict of requirements is not difficult to resolve if one holds firm to the belief that cold war needs should have priority, and to the conviction that a war would be decided by strategic air power whilst our armies would be fighting delaying actions and would



not be regarded as offensive instruments. In the light of these beliefs it is clear that, whilst keeping an adequate force in Europe, we should concentrate on our cold war needs.

Now that the end of the Korean war and the redeployment of our forces in the Middle East has lessened the commitments of the Army, it seems appropriate to consider whether any economies are possible. As we must clearly maintain the divisions which we have allocated to N.A.T.O., and must retain our ability to play an appropriate part in any limited wars which may develop, the field for economy is limited. It is for consideration, however, whether it might not be possible to modify the equipment and establishment of certain infantry divisions and earmark them for cold war purposes only. These divisions, which might be termed light infantry divisions, would be organized for the type of cold war tasks of which Malaya and Kenya may be taken as classic patterns. They would operate at much reduced establishments and with a very small proportion of supporting arms. If a number of these divisions were set up they could be made fully air transportable and, backed by an enlarged Transport Command, would very greatly add to the mobility and flexibility of our forces. It is thought that by the introduction of these light infantry divisions we could continue to meet our existing scale of commitments with smaller forces and that, because of the increased mobility and flexibility, we would be able to hold a greater proportion of the Army in strategic reserve in this Country.

If, as has been argued, the role of our armies in Europe and overseas will be to fight holding actions while strategic air power brings Russia to defeat, the part which our reserve forces will have to play needs examination. Our chosen strategy rests on a quick victory. If Russia is not beaten by the time we have exhausted our stocks of nuclear weapons, we cannot hope to avert the defeat of this Country. If this analysis is correct, only those reserves which can be deployed in the first phase of war can influence its outcome. How long this phase might last is a matter for conjecture, but as every advantage will lie in delivering the greatest number of nuclear bombs as quickly as possible and thus minimizing the enemy's retaliatory power, it would seem reasonable to assume that it might be measured in days. If this is true, only those Regular forces which are in reserve are likely to be able to be brought to bear, and we are face to face with the question of whether there is any point in continuing to train the Territorial Army for a fighting role. This question is the more pertinent when related to the conditions which might prevail in this Country under nuclear bombardment.

If, as is only prudent, one considers the worst case of heavy and successful nuclear attack upon this Country, it is far from inconceivable that London and all other major ports would be put out of operation in the space of days or even hours. Casualties might well run into millions and communications be so disrupted that large areas of the Country would be virtually isolated. Disaster on this scale would make it necessary to deal with casualties quickly to prevent plague. Emergency action would also be needed to distribute food stocks, restore communications, and clear the cargoes coming into the minor ports. For all these tasks trained and disciplined manpower would be vital. The training of part of the Territorial Army for this role would go a long way towards meeting our needs, would put Civil Defence (which is in danger of becoming a discredited term) in its proper perspective, and would restore public confidence in Government policy in this field.

It would therefore seem that, even when a measure of insurance has been allowed for in continuing to train part of the Territorial Army for a fighting role, considerable

economies could be made and advantage be gained by training the bulk of these forces for Civil Defence duties. Additionally, it is clear that a reduction in expenditure on anti-aircraft units will progressively result as the emphasis changes from the gun—which is already useless against high-flying aircraft—to the guided weapon under Royal Air Force control. To this saving can be added that which would result from the formation of light infantry divisions for cold war tasks, whilst there may also be gains to be made by putting greater emphasis on the replacement of Regular units by locally enlisted forces. From a cursory examination it therefore appears that considerable economies could be made in the Army without detracting from its deterrent value or affecting its ability to meet its existing scale of commitments.

#### AIR FORCES

Whilst any forces of all three Services which tend to discourage the Russians from embarking on war add to the deterrent, there can be little disagreement that the effectiveness of the deterrent rests for the most part on strategic air power. As established earlier in this paper, it is therefore vital that we give priority to building up the hitting power of Bomber Command. This is not to say that we should concentrate on building bombers at the expense of inter-Service balance or to the detriment of balance within the Royal Air Force, but merely that the construction of the necessary number of bomber aircraft should have first charge on the resources of the aircraft industry. Happily there is no longer any great significance in the number of bombers which a country has; the days of the massed raids are over. With the destructive power of the hydrogen bomb, all that is necessary is to have sufficient aircraft of the requisite performance, and 'sufficient' may well be quite a small number.

Whilst we have always recognized the hard fact that fighters cannot prevent a large proportion of attacking bombers reaching their targets, we have not faced up to the implications of this fact in nuclear warfare. These are two in number. Firstly, that Fighter Command, though it might inflict severe casualties, is powerless to prevent attack by the few score bombers which would suffice to paralyse this Country. The second implication follows from the first, and is that the value of Fighter Command is largely that of a deterrent as demonstrating to the Russians that attack would be costly. As there is no reason to think that the prospect of heavy casualties would greatly influence the Russians, and as it would seem that counter-attack on enemy bomber airfields with nuclear weapons is likely to be the most effective form of defence, it is questionable whether the present large expenditure on Fighter Command is justified. If a very large Fighter Command will not be able to fulfil its purpose, then it would appear that considerable economy could be made in our fighter defences without reducing them to a level which would either invite attack or greatly disturb public confidence and morale.

Similarly, the whole matter of tactical air support requires review. The balance of our Tactical Air Force in Germany, though stronger in fighters, is substantially the same as that which proved so successful in the last years of war—that is to say, it is primarily designed to give support to an army advancing in conditions of mobile warfare and against little opposition from an enemy air force. As such, it is not the instrument required either by the conditions of warfare it is likely to meet or by our recommended strategy. The Army will not be advancing, but will be fighting a defensive battle. The conventional use of aircraft is not at any time an economical or effective method of countering an enemy land advance, least of all when that enemy has great numerical superiority in the air. In a defensive battle the first task

of the air is to protect the Army from the attacks of the opposing air force. To meet the conditions which we must expect at the start of the next war we therefore require a Tactical Air Force strong in fighters. It must in addition have a reconnaissance element, but we should discard any idea of giving effective support with conventional weapons and should limit the striking power of the Tactical Air Force to a very small force of light bombers armed with tactical atomic bombs. If light fighters are found to be suitable it may well prove possible, for a reduced expenditure, to maintain a Tactical Air Force in Germany which is equal in numbers, superior in hitting power, and better able to perform its task than our present forces.

On the tactical side there is, in addition, the need to provide forces suitable for our cold war commitments overseas, including the possibility of further limited wars. Here again it seems probable that, provided atomic weapons are not used, the light fighter in the interceptor and ground attack role, in conjunction with an increased transport force, will meet the majority of our needs more effectively than our present forces.

Within the framework of priorities, Coastal Command and the maritime squadrons overseas can be considered adequate with the reservation that, for civil as well as military reasons, it is necessary to make provision for a replacement flying-boat. As it has already been decided, when considering land forces, that Transport Command would need to be expanded (there is again scope for flying-boats in this context), it is now possible to review the shape of the operational commands of the Royal Air Force as a whole. First would be Bomber Command, small in numbers but with tremendous hitting power and second to none in quality and efficiency. Then Fighter Command, reduced in numbers but improved in quality, maintained at a level sufficient to demonstrate that attack on this Country would be a costly enterprise. Third on the list, but second in importance in cold war, would be an expanded Transport Command which would greatly add to the flexibility of our land forces. The Tactical Air Force in Germany would be at a strength appropriate to the four divisions which it would support in war, and would be well balanced for the task. Coastal Command would remain much at its present strength, whilst the balance of our air forces in the Middle East and Far East would be slightly altered by the addition of transport aircraft and the introduction of light fighters.

#### FINANCIAL CONSIDERATIONS

Whilst at first sight it might appear that the proposed changes in the Royal Air Force would involve extra expenditure it is thought that detailed costing would not support this impression. The re-equipment of Bomber Command has already been partly budgeted for, and it is thought that the economies which could be made in Fighter Command and which would result from the proposed readjustments in the Tactical Air Force and overseas, would suffice to balance the cost of expanding Transport Command, particularly as this Command has comparatively small overheads and would partly pay its way by air trooping.

The measures of reorganization which have been suggested within the Army and the Royal Air Force should result in our forces being well fitted for their cold war tasks. If we are prepared to back our belief that world war is unlikely, then the significant financial saving which could be made on the Army should be used to reduce the Defence Vote. If, however, as a measure of insurance against hot war, it were decided to use this money on armaments, then it would seem that priority should be given to the Royal Navy as being the Service least prepared to discharge the tasks which would be required of it in war.

## CONCLUSIONS

This paper rests on the belief that, because of the annihilating character of nuclear warfare, Russia will seek to attain her aim of world domination by cold war methods so long as the preparedness of the West denies her the possibility of a quick and decisive victory. If that view is accepted, British strategy is clear. Fashioned by the three cardinal national aims—the prevention of war, the maintenance of our economic structure, and the maintenance of our position as a world Power—it should, as a first step towards real peace, be designed with the twofold object of deterring the Russians from having resort to war and of preventing Communist expansion in cold war. From these priorities, and from the realization that we are engaged in a long struggle in which national solvency is vital, British strategy and its force requirements emerge.

For our strategy to be effective as a deterrent, and for this Country to continue to exercise its accustomed influence in the councils of the world, it is vital that we develop our nuclear capability. We must, therefore, foster our strategic bomber force whilst maintaining our Army in Europe and a balanced fleet, both of which are an essential part of our deterrent forces. To prevent Communist expansion in cold war, the main need will be for land forces. At present the bulk of our divisions are not sufficiently mobile and should be streamlined for the type of fighting they will meet, and be given increased mobility and flexibility by a big expansion in Transport Command of the Royal Air Force. Together with their attendant air forces, these reorganized divisions must be backed by a small but modern and well balanced fleet. If global war should come it is probable that it would be short and, although all Services would be essential, strategic air power would be the decisive instrument.

To give effect to this strategy with the greatest efficiency and economy, a measure of reorganization is necessary within the Army and the Royal Air Force. The bulk of the Regular Army needs reshaping for its cold war tasks, whilst there is no point in maintaining a large Territorial Army which could not be deployed in time and would not, in any event, be a war-winning instrument. There is need for a large part of these reserve forces in Civil Defence. Within the Royal Air Force it is necessary to hasten the build-up of the strategic bomber force, to expand Transport Command, to review the establishment of Fighter Command, and to adjust the balance of the Tactical Air Force and overseas forces by the early introduction of a light fighter.

Neither the adoption of this strategy nor the provision of the balanced forces required to give effect to it will prevail unless this Country has the backing of the Commonwealth and unless the unity and common purpose of the West is maintained in the long struggle which lies ahead. It has been well said that, "it has fallen to our generation to fight yet again, and on a world scale, the age-old duel between tyranny and freedom. That is the heart of the struggle between the Soviet Union and the West."<sup>1</sup> In this struggle we must have unity and steadfastness for, in the words of Tom Paine, "Tyranny, like hell, is not easily conquered."

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<sup>1</sup> *Inquest on an Ally*, by Paul Winterton.



## MOVEMENT — WITH AND WITHOUT — CONTROL

By MAJOR-GENERAL V. BOUCHER, C.B., C.B.E.

B.E.F. 1939-40—BASE PORT

SOME of it sounds funny now. Then, with men's lives depending on the timely arrival of supplies and with the fate of battles hanging on petrol and ammunition, the movement problem took on a grimmer note.

Before the war the education of the staff officer in Movement Control was neglected. There was the Staff College exercise at Poole, a light-hearted caper at which one laid out a base sub-area behind that tiny port and later explored the night life of Bournemouth, of which there was very little; and there was the Railway Training Centre at Longmoor. Hats off to Longmoor! Had it not been for that gallant band of apostles who kept the technique alive and up to date, we should have been in poor shape in September, 1939.

In June of that year a slim buff envelope appeared in my pigeon-hole at Minley Manor. It contained the announcement of my mobilization appointment—D.A.Q.M.G.(M) of a base sub-area. I had to ask a member of the Directing Staff what the (M) part of it stood for. "Movement," he said, "... I think." A search of the manuals provided no clue. Then someone mentioned Longmoor. Thither I sped and found the chief instructor. Little did I realize that three months later he was to be my boss. He knew it, but didn't let on.

Together we had half-an-hour of 'Movement without Tears.' Thus equipped, I went to war on 3rd September, several hours too early, for the aircraft put me down at Le Bourget at lunchtime and the French did not declare war until 4 p.m. Our Military Attaché hid my colleagues and myself for the requisite time and on 4th September, I motored in a requisitioned car with no brakes to Brest, which, I had discovered from the sealed envelope in my possession, was where I was to receive and pass through a large slice of the personnel and stores of the two corps which formed the British Expeditionary Force.

During the long drive and between heart attacks, caused equally by the rudimentary knowledge of driving of my Alsatian chauffeur and the complete absence of stopping devices in the car itself, I learned also that I had been allotted half a Movement Control group, a supplementary reserve unit composed of experts in the art of port and railway working. They were to arrive by ship next day.

It was a very lonely D.A.Q.M.G.(M) who descended from the car in the main street of Brest at midnight. Presently, however, other members of the base staff began to drift in by diverse means and by noon the following day, we had requisitioned the biggest hotel and, working on the maxim that any fool can be uncomfortable, had engaged the chef of Prunier's in Paris, who had arrived to join the French Navy, but whom we intercepted in time. We squared matters with the local admiral later.

It is not the purpose of this account to go into details of tonnages handled and personnel landed. Such figures can be found in the records if required. Rather, by recalling in very general terms the course of events, shall I try to draw what, to me at any rate, were the lessons our untutored team learned as we went along. Some, obvious now, we had to learn the hard way then.

For the first few days little went right. There was labour trouble in at least one port at home and it was soon clear that stores had been bundled aboard in an order

very different to that contained in the immaculate appendices of the plan. Having, for example, guaranteed the D.D.S.T. a nice lot of rations from one ship, it was disconcerting to discover, on opening the hatches, that the first few hundred tons of her cargo consisted of chemical fire extinguishers.

It became obvious, too, that Movement Control does not finish at the dock gate. Stores, which are not going on by rail, must be lorried to local depots: personnel must be moved by road to the railway station or the transit camp. There is in short a nice traffic problem, which demands an intimate partnership between Q(M) and the Provost Marshal.

Such facts of life as the above pointed straightway to the importance, nay, the absolute necessity, of the daily co-ordinating conference. Early each morning the base commandant and the heads of his staff branches and services met to report yesterday's progress and to decide today's plan. Our discussions ranged wide—from how to fit out with uniform an outsize pioneer, who had come to war in a brown suit and a trilby hat, to the siting of a base ammunition depot.

One thing is certain; those daily meetings made a team of us. In a fortnight you would not have recognized us. The port was working and the unannounced arrival of a squadron of tanks, which should have gone to Cherbourg, or of an E.N.S.A. party, who had no clue as to where they were meant to go, caused us neither pain nor surprise.

But I could not help reflecting sometimes that a benign destiny was on our side in affording us that breathing space in which to shake down. We were not bombed and the mobilization of the French armed forces did not noticeably affect the functioning of that Breton port. Sensibly they seemed to put key men into uniform and then allow them to carry on with their jobs. Later, in Arras, I remember the manager of the hotel in which we were billeted disappearing after breakfast one morning and returning at lunchtime, dressed as a full-blown private, to continue to run the hotel.

Shall we, in an atom war, ever get a breathing space again? The staff of a base was, and probably will be, about three-quarters reservists of one sort or another (at Brest, if my memory serves me, we started off with four Regular serving officers). Yet, during the first weeks, a base is a critical place. In atomic war it will be more critical still. Somehow time must be found to break in the team that will have to run it. The first day of war will be too late. It is a problem which has as many political as military implications.

#### RAILHEADS

Soon the B.E.F. was trundling forward, first to its assembly area round Le Mans; later to its permanent locations in front of Lille, Amiens, and Arras.

After five weeks in Brest I was sent up to join the railhead organization, where my technical colleague, a D.A.D.Tn., had already put in much valuable spadework with the French railway authorities from his office above Amiens station.

Our first job was to select sets of railheads for each of the two corps and for G.H.Q. Troops, who thus early were threatening to rival a corps in size. This was fascinating work. Accompanied by a selected R.T.O., himself a trained railwayman, we would set off in the staff-car early each morning with a pre-arranged set of stations to look at. At each we would discuss its merits and demerits with the stationmaster, often adjourning to a convenient estaminet for coffee and a *fine* to help our debate

along. Then we would beg, borrow, or steal a station diagram from him, or, if he had not got one, would sketch one for ourselves before continuing to our next port of call.

That evening we would call in at G.H.Q. for our recommendations to be approved by the A.D.Tn., the senior officer who had taught me Movement Control in half-an-hour at Longmoor the previous Summer. Once approved, we would staff the selected railhead with an R.T.O. and the requisite number of clerks and checkers.

The main lesson I carried away with me from my period in charge of railheads was the importance of Liaison, with a capital L.

The efficiency of an individual railhead could be measured by the state of relations reigning between the R.T.O. and the station staff. Indeed, liaison sometimes ranged into the village itself, for the Movement Control staff were often the only British soldiers in the place and the R.T.O. would find himself a sort of glorified town major in addition to his own duties.

Well I remember visiting a young R.T.O. early one morning to find him dressed in his best. A local bigwig had died. The mayor, a Communist, was temporarily the guest of the Government. The R.T.O. was just off to represent the mayor at the funeral. Need I add that that particular railhead ran like clockwork?

From my own office liaison extended forward, backward, and sideways: forward to the staffs of the corps we were serving, backward to G.H.Q. and regulating area, and sideways to the French railway authorities around us.

Once more we were blessed by the phoney war. We were given time to settle down and to benefit from our mistakes. We might have been doing a major Staff College exercise, with the added advantage that we were supplying real soldiers from real trains. Indeed, periodical visits by batches of students from Camberley soon became a regular feature of our routine. On these occasions I would hold forth from the deck of a trolley as the daily pack-train rolled into some supply railhead. By then so exact had become our drill that I could stick my neck out so far as to declaim with confidence, "In the third wagon down, gentlemen, you will find 'local purchase' vegetables," like some conjuror disclosing the whereabouts of the gold watch which he had stolen from an unsuspecting patron earlier in the performance.

One thing is certain. For those of us who stayed in Movement Control, that glorified Staff College exercise of the phoney war stood us in good stead for all time. Thereafter we were able to apply the lessons of that peaceful period to situations which allowed of no breathing space. Like recruits leaving a regimental depot after basic training, we stepped into the next phase of war well versed at least in the elements of our trade.

#### MORE RAILHEADS

On 10th May, 1940, the B.E.F. left its prepared positions in France, for which the thousands of tons of stone and cement had caused us so much sweat, tears, and bad language, and advanced into Belgium to counter the German invasion of the Low Countries.

I was ordered to take a Movement Control group forward and establish a new set of railheads for I and II Corps short of Brussels. Time was no longer on our side, for trains of supplies, ammunition, and petrol would be rumbling forward on our heels. Within a few hours of our arrival at the new location it would be my responsibility to let G.H.Q. know the appropriate destination for each commodity.

We made as simple a plan as possible. First, in conjunction with the corps Q staffs, we picked two arbitrary sets of railheads from the map and from such station diagrams as we could lay our hands on. Next, I allotted a really experienced R.T.O. to each corps. He and a Q staff officer of the corps would go forward and have a quick confirmatory look at the stations selected. We had drawn up a reserve list, too, in case any of those originally chosen should prove completely unsuitable. Finally, two rendezvous were picked, at which I should meet the recce parties in the afternoon and ascertain the railheads finally chosen. These I should report back to G.H.Q. by 'phone or despatch rider.

The plan worked like clockwork in the case of I Corps. My R.T.O. was waiting at the rendezvous with his list of railheads ready. By tea time it was on its way back. At the II Corps rendezvous, however, there was no one. I thought I knew where they were going to establish their headquarters. Thither I went as fast as my staff car would carry me.

Corps Headquarters were still arriving. In the Q office I found a learner staff captain. Bad news had just come in. The A.Q.M.G. and my R.T.O., while reconnoitring one of the pre-arranged railheads, had both been killed by a bomb from a lone raider. The war had been going for eight months. These two must have been among the first half-dozen casualties caused by enemy action. Not only was it a personal shock; it pointed a sharp lesson, too. We had become used to every sort of calamity, except battle casualties. We had been lulled into a sense of false security. Henceforward our plans must cater for casualties, as well as the other misfortunes that can befall an L. of C.

#### MOVEMENT WITHOUT CONTROL

We were not allowed long to break in our Belgian railheads. Communications were a chronic headache and I soon found that the only efficient way of maintaining contact with corps and G.H.Q. was by daily visits, during which the D.A.D.Tn. held the fort at my headquarters, which I had established at Grammont.

It was on one such visit to G.H.Q. in mid-May that the A.D.Tn. took me to the information room and showed me the ugly black arrow that denoted the German thrust to the south of the B.E.F. Already it looked plain that the enemy would next strike north to the sea, clean across our L. of C.

From then on the movement problem became a nightmare . . . and the details of a nightmare are not easy to remember. We got back what we could while the rail L. of C. held. About the last two trains to depart carried two casualty clearing stations, with their complement of nurses. My own D.A.D.Tn. personally drove a train from railhead to Lille. Soon, however, backward train movement became impossible and trains were abandoned where they stood—in tunnels, in sidings, on the main line.

The very simplest plan—if plan it could be called—was all that could be contrived. Wisely I was ordered to send home my more technical personnel. There was nothing more they could do and obviously their services would soon be required to bolster up the Movement organization in England. I kept a handful of officers, whom I made mobile with motor-cycles and cars. These I sent out daily to search stretches of railway line. Each evening they reported what they had found and where.



I would then do my best to get either to corps or forward G.H.Q. to report, and lorries would then be sent to the stranded trains to unload what stores were most urgently required *in situ*. The appalling state of the roads caused by refugees made the task of none of us any easier; nor did the fact that the rate of our own withdrawal forced me to change my own headquarters almost every night.

It was not a method of supply advocated in the manuals. It was, I believe, the best that could be accomplished under the circumstances and it showed, at least, that a Movement Control group was capable of flexible operation! We kept what I called the 'shikhar party' technique going until supplies started to arrive from England over the Dunkirk beaches.

#### INDIA. 1944-46

In January, 1944, I was appointed Director of Movements at G.H.Q., India. A recent reorganization had just seen the appointment of a D.Q.M.G. (Mov. and Tn.) to the Q.M.G.'s staff and, answering to the former, was the twin partnership of the Director of Movements and the Director of Transportation. It was soon apparent that the partnership had to be a very close one indeed and D.Tn. and I rapidly became as nearly Siamese twins as made no difference.

The movement problem in India was a dual one, though the two parts of it merged in many respects. First, there was the increasing volume of internal traffic to be tackled, and secondly, the capacity of the Assam L. of C. had to be trebled. Along this L. of C. flowed the reinforcements and supplies for the British 14th Army, the American/Chinese task force, the American forces in charge of the construction of the Ledo road, and the American Air Forces engaged in flying stores over the notorious 'hump' into China itself. All had to be supplied with minimum interference to civilian maintenance and the important tea traffic.

The first part of the problem—internal movement—was comparatively straightforward, though it involved a great increase in Movement Control staff. Fortunately our successful liquidation of campaigns nearer home, notably in the Middle East, made a number of experienced officers available to us.

I found that the static organization that had been set up in the United Kingdom after Dunkirk could be suitably adapted for India. This consisted, under G.H.Q., of a Q(M) staff at each Command Headquarters running a number of area movement staffs, corresponding as closely as possible to military districts. A measure of the movement problem involved is afforded by the figures for personnel alone. We estimated that the daily average of all ranks 'in transit' throughout India in 1944 was of the order of 25,000: not a large figure for a country possessing a concentrated railway system of high capacity, but a formidable one on an attenuated system with limited and primitive rolling-stock.

The Assam L. of C. was a vastly more complicated business. The term itself is a misnomer, for the L. of C. serving the Anglo/American forces in Burma and China in fact stretched from the North American continent to the extreme north-eastern point of India. Of the whole chain, Assam was in truth the weakest link. Our target figure for freight for 1st January, 1946, was 10,000 tons per day: in November, 1943, we were handling less than 3,000 tons per day. In May, 1945, when we reoccupied Rangoon and an ocean L. of C. became possible again, the Assam L. of C. was handling just on 9,000 tons per day.

A more unpromising L. of C. could hardly be imagined. In the monsoon the Bramaputra rose 37 feet, throwing one river ghat after another out of commission in the process; year after year railway bridges were washed away, a matter of no more than philosophic regret in peacetime, but one of vital import in war. Whichever way you sent stores by rail a break from broad to metre gauge was inevitable; on the metre gauge, railway trains had to be broken up at the riverine ports of Amingaon and Tistamukh, sent over the river by ferry, and remarshalled on the far bank.

The competing claims of airfield construction and the tea gardens necessitated the importation of labour from as far away as Mysore and Madras. Finally, handling facilities for such heavy loads as cased locomotives for the Burma railways, bulldozers for the Ledo Road, and river craft for the Irrawady were almost non-existent.

To describe the measures that were taken to achieve our target figures would fill a book. There is space here for only a brief summary of the major steps. Things happened gradually and the daily figures crept up the progress chart all too slowly for our liking and that of our customers!

It was clear that the operation could not be supervised in detail from New Delhi. I therefore opened a second office in Calcutta, which I placed in charge of a deputy director who enjoyed wide local powers. It was equally clear that neither the peacetime staff of the Burma-Assam Railway nor the peacetime railway rules could carry the additional burden. Accordingly, after much negotiation, we 'imported' a 'grand division' of American Railway troops who shared the operation of the line with civilian staff.

Though our hearts were in our mouths, safety rules were gradually relaxed, rolling-stock was brought in from America, locomotives from England, trains were lengthened. There were growing pains, such as when an American 'student-driver,' shunting wagons on to a river ferry, misjudged the slope of the bank, overran the flat deck of the ferry and pushed everything into the Bramaputra, where, for all I know, it still is. Soon, however, the little railway was handling tonnages undreamt of in peace.

Meanwhile our own transportation troops were doing herculean work, doubling hundreds of miles of track, improving facilities at transshipment points, and diverting tributaries particularly notorious for washing out stretches of line in the rains. We aimed, too, to take everything we could off the over-taxed railway. The river steamers were working to capacity, but pipe-lines for petrol offered an obvious alternative. Five were laid, one the longest in the world, and between them they relieved the railway of many hundreds of tons of freight per day.

So the quadruple L. of C. of railway, road, inland water transport, and pipe-line developed. At the beginning of this paper I emphasized the necessity for teamwork in Movement Control. I end on the same note. In north-east India we were a big team—Indian Railways, American and British transportation troops, Movement Control, river steamer companies, labour—yet long before the Japs cried 'peccavi,' we were working as one. Only thus can a military plan of any sort be made to succeed.

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## MINELAYERS

By CAPTAIN J. S. COWIE, C.B.E., R.N. (Rtd.)

IT is the purpose of this article to discuss the essential requirements for vessels employed in various types of minelaying operation, to review the manner in which these requirements have been met in the past, and to make some suggestions as to the future. The majority of the views expressed are based on British experience, but it is none the less believed that the principles enunciated are capable of general application.

Apart from the laying of controlled minefields for purely harbour defence purposes, a specialized aspect of the subject which does not fall within the scope of this discussion, there are two broad categories of operation to be considered:

- (a) the 'protective', involving the laying of mines in waters which are under the control of the power conducting the operation, or one of her allies; and
- (b) the 'offensive', involving the laying of mines in waters which are under the control of an enemy power or powers.

In addition, there is a specialized aspect of the latter category, that is to say, the laying of mines by purely clandestine methods.

### PROTECTIVE OPERATIONS

Although it is true to say that on certain occasions vessels designed for laying mines in enemy waters have in fact been employed on protective operations, this has as a rule been done as a matter of expediency rather than of principle. Where protective operations have to be conducted at some distance from a base and involve the laying of large numbers of mines, the essential requirements are mine-carrying capacity and good sea-keeping qualities, rather than high speed. Vessels capable of conversion for minelaying duties, and fulfilling these requirements, have in the past been employed on such operations, the two principal examples of which are the northern barrage, laid by American and British minelayers in the 1914-18 War, and the Orkneys-Iceland system of minefields, laid by British minelayers in the 1939-45 War.

In the laying of the northern barrage, eight converted American merchant vessels were employed, with an average capacity of 660 mines each, but it is to be noted that two converted cruisers (the *Baltimore* and the *San Francisco*) were also included in the squadron, with a very much smaller capacity of 180 and 170 mines respectively. The British force originally consisted of four merchant vessels which had earlier been converted for use in offensive operations, but both the endurance and the capacity of two of these ships was found to be too low, and they were replaced by a converted battleship (the *London*) and a converted cruiser (the *Amphitrite*).

In the Orkneys-Iceland system of minefields laid in the 1939-45 War, five converted British merchant ships with an average capacity of 520 mines each were primarily employed, but the force was from time to time augmented by the cruiser-minelayer *Adventure*, to which ship further reference will be made.

The advantage to be derived from the employment of ships having a large mine-carrying capacity for operations of the above-mentioned nature is that the larger the number of mines laid in each sortie, the smaller the total number of sorties required, and in consequence:—

- (a) the fewer the gaps between groups of mines laid in successive sorties ; and
- (b) the smaller the overall requirements for escorting forces, both surface and air.

It is, however, of importance to note that there is a limit to the size of ship which can usefully be converted for service as a protective minelayer. This limit is imposed by the operation, either singly or in combination, of a variety of factors, such as berthing and handling difficulties, and the logistic problems associated with the transport, storage, preparation, and embarkation of a large number of mines at one time. Past experience, in fact, tends to show that the type of vessel most suited to large-scale protective operations in the open sea is the converted cargo-liner of about 6,000/7,000 tons, capable of carrying and laying something of the order of 600 mines. The employment of converted warships in the latter part of the 1914-18 War was primarily due to the fact that at that stage of the proceedings mercantile tonnage was at a premium, whereas obsolescent war vessels were available in relatively large numbers.

For protective operations in enclosed or restricted waters, navigational considerations as a general rule call for the employment of comparatively small ships ; on the other hand, endurance and sea-keeping qualities are of less importance.

The consequent reduction in mine-carrying capacity has to be accepted and, paradoxical though it may seem, British experience has shown that a mine depot may function more smoothly and more effectively when called upon to deal with small numbers of mines at frequent intervals, rather than with large numbers of mines at protracted intervals, even though over a given period of time the aggregate number of mines actually embarked and laid may be the same in each case.

The increased number of sorties imposed by the use of ships having a small mine-carrying capacity, with the consequent increase in the number of gaps between adjacent groups of mines, is of less importance than in the case of operations conducted at a distance from a base. In the first place, the shorter run, coupled with the greater variety and effectiveness of available navigational aids, tends to enable the minelayers to approach more closely to minefields laid in earlier sorties, thereby reducing the size of the gaps. In many cases, in fact, it may be both practicable and desirable to carry out a preliminary survey of the area to be mined and to lay mark buoys, thereby reducing the size of the gaps to insignificant proportions.

Secondly, many anti-submarine minefields laid in coastal or near-coastal waters may be of the deep 'trap' variety, designed to be safe for the passage of friendly surface vessels. In these cases, the problem of gaps between successive lays does not arise.

A further consideration affecting the choice of vessels capable of meeting the requirements for the type of operation under discussion is that in many cases specialized craft, such as train ferries, car ferries, etc., may be available, which require very little, if any, actual structural alteration to convert them for service as minelayers. All that is necessary is the fitting of mine-rails and the installation of minelaying equipment.

It will be apparent from what has been said above that, in the opinion of the writer, conversion of suitable vessels should be relied upon to provide for the laying of protective minefields, rather than the building of minelayers specifically designed



for the purpose. This opinion is based on two principal considerations, the first of which is that the advocates of mine warfare are apt to encounter great difficulty in justifying the appropriation in peace-time of public funds for the construction of ships which do not present an obvious and tangible return for the money expended, and which may never be used in active operations of war.

The second consideration, which to some extent serves to redress the balance, is that conversion can be effected with extreme rapidity, *provided that the ships are earmarked in peace-time, the plans for conversion are completed, and the necessary equipment is procured, stored, and maintained in working order.* This is particularly so in the case of specialized craft, to which reference has already been made. For example, at the beginning of the 1939-45 War, the British train ferries *Hampton* and *Shepperton* were, in accordance with pre-war plans, taken up and converted, an operation which was completed in a few days, including the carrying out of practice lays.

It must, of course, be conceded that in the rare event of higher authority being persuaded to build a protective minelayer in peace-time, considerable advantages may accrue. The British 'coastal' minelayer *Plover* is a typical example, but it must be emphasized that her construction had to be justified on the grounds that she would perform a useful role in peace. This small but seaworthy vessel, laid down in 1936, was designed to carry 80 mines, and she was also equipped with mine-sweeping apparatus, special gear for the recovery of experimental mine units, and a housing for such special instruments as might be required for experimental purposes. In war, all the special equipment could be removed, a light gun armament substituted, and the mine-load increased to 100.

This ship proved invaluable for pre-war trials and training, and she performed excellent service in the 1939-45 War; to her, incidentally, fell the honour of laying the first British minefield, an operation which she carried out on the afternoon of the day on which that war was declared. By a curious coincidence an almost identical vessel, the Dutch *Wilhelm Van der Zaan*, escaped to England at the time of the invasion of Holland, and these two ships carried out many operations in harmonious co-operation.

#### OFFENSIVE OPERATIONS

Historically speaking, the laying of a minefield in enemy waters is essentially an operation of stealth; the greater the extent to which its execution can be hidden from the enemy, the greater the chances of exploiting the element of surprise.

Except, however, in certain circumstances, to which reference will be made in due course, modern developments in methods of detection, together with the introduction of aircraft as minelayers, have tended to render it progressively more difficult to keep an enemy in complete ignorance of the fact that mines have been laid.

This difficulty has to some extent been countered by ingenuity in the design of the mines themselves; that is to say, the element of surprise may be embodied in the mine, rather than in the method of laying. None the less, it remains true to say that when considering the type of vehicle to be employed for the carriage of mines into enemy waters, the power of evasion is of more importance than mine-carrying capacity.

As in the case of protective minefields, mine warfare enthusiasts have in the past experienced considerable difficulty in securing the appropriation of funds for the construction of ships or aircraft specifically designed as minelayers; in view of

the fact that the pros and cons of this question vary according to the class of minelayer concerned, e.g. surface, submarine, or air, it will be convenient to deal with it separately in relation to each of those classes, together with the fundamental question of the extent to which the power of evasion can or cannot be embodied therein.

#### SURFACE MINELAYERS

In the pre-radar era, the power of evasion was conferred by high speed or low silhouette, or a combination of the two, while before and during the 1914-18 War the policy of conversion had preference over that of building ships specifically designed as minelayers. Thus before 1914 the only British minelayers in existence were seven obsolete cruisers of the *Apollo* class, and experience in that war very soon showed that these ships were both too slow and too vulnerable.

Further experience showed that as a general rule merchant vessels are unsuitable for conversion as offensive minelayers. On the one hand, those having the necessary speed are usually too large; for example, in the 1914-18 War, the British s.s. *Orvieta*, a passenger liner of over 12,000 tons, was converted to carry 600 mines ready for laying, with a further 600 stowed below in reserve. Although technically suitable, she in fact presented an unacceptably large target and drew too much water.

On the other hand, small passenger-carrying ships having the necessary speed are as a rule too lightly constructed, or their internal lay-out is unsuitable, or their radius of action is too low. An outstanding exception to this general rule was provided in the 1914-18 War by the British ships *Princess Margaret* and *Princess Irene*, but these two vessels were by no means typical, having been specially designed for the run between Vancouver and Seattle. The *Princess Irene* was destroyed by an internal explosion in the early part of the war, but the *Princess Margaret* with her high speed, shallow draft, and comparatively small silhouette, carried out many successful operations, in the course of which she laid a total of 25,000 mines.

It will thus be seen that the majority of the offensive operations carried out by British surface minelayers in the 1914-18 War were entrusted to converted war vessels, including light cruisers, destroyers, and coastal motor boats. Three points fall to be noted in connection with this policy:—

- (a) all the ships employed embodied the necessary powers of evasion;
- (b) reversion to their normal roles could be rapidly effected; that is to say, they were not permanently tied up in a separate minelaying force; and
- (c) the coastal motor boat exemplified the contention, noted above, that in operations of this nature the power of evasion is of more importance than mine-carrying capacity.

If, in fact, a minefield can be laid with accuracy in a *useful* position without the awareness of the enemy, it may in suitable circumstances be unnecessary for it to comprise more than two or three mines. The writer, for example, had the supreme satisfaction in the 1914-18 War of being present in a coastal motor boat at the undetected laying of two mines so close in to the entrance to an enemy harbour that the glow from a cigarette being smoked on the breakwater was clearly discernable. (The use of the word 'undetected' is here justified by the events which followed.)

In spite, however, of the general success of the policy of conversion adopted in the 1914-18 War, many officers took the view that a properly balanced fleet should none the less contain a proportion of ships designed and built as minelayers. In the first place, it was urged that the result would be to prevent the influence of the mine

on naval warfare from receding completely into the background of peace-time thought and training, and secondly, that in the event of another war it might well prove impracticable to release from their primary role any vessels suitable for conversion. Finally, it was suggested that the nucleus of any offensive minelaying force should be comprised of ships designed and equipped to carry out such operations in the most efficient manner.

As a result, British policy in the period between the two wars went through three distinct phases :

(a) The Admiralty accepted the view that a minelayer should be built, but the reluctance to appropriate funds for projects of this nature, to which reference has already been made, resulted in the adoption of a compromise in the shape of the cruiser-minelayer *Adventure*.

This hybrid ship (one of whose peculiar features was the fitting of a diesel propulsion unit in addition to the normal steaming installation in order to provide a large radius of action at cruising speed) performed a useful function in peace, but she was too lightly armed to operate as a cruiser, while experience in the early days of the 1939-45 War showed her to be too large and too slow for employment on offensive minelaying operations in enemy waters.

Nevertheless, she proved of value as a member of the squadron engaged in the laying of the Orkneys-Iceland minefields, both as a minelayer and as an anti-aircraft escort. Further, in connection with the North African operations, she was usefully employed in ferrying mines from the United Kingdom in a condition ready for rapid transfer to, and laying by, the fast minelayers, of which more later.

(b) In the second phase, the decision was taken that a certain proportion of the vessels comprising the destroyer building programme should be designed for rapid conversion to minelaying duties if required, with the proviso that any minelaying equipment *permanently* installed should in no way interfere with the performance of their primary role as destroyers.

This policy (which had in fact been adopted with respect to certain destroyers built in the latter part of the 1914-18 War) was unquestionably sound. Although, in the event, only six of these ships were actually employed as minelayers in the 1939-45 War, it was extremely gratifying to those responsible for the conduct of operations to know that there was a reserve of suitable vessels actually in being. They could be converted for service as minelayers in 48 hours, and could revert to destroyers proper in five hours.

(c) Finally, a memorandum which the present writer is proud to have had a hand in drafting, was presented to the Admiralty in the year 1935, urging the construction of a small number of specially designed vessels to form the permanent nucleus of an offensive mine force.

This last plea resulted in the inclusion in the 1938 British building programme of two fast minelayers, H.M.S. *Abdiel* and H.M.S. *Latona*. These beautiful little ships, of 2,650 tons, had a designed speed of 39 knots, a small silhouette, a good radius of action, and an adequate gun armament. They carried 160 mines each, and were equipped with a well-designed and efficient type of mechanical mine-laying apparatus.

In the course of the war, four more similar ships were built, and they all performed excellent service. The interesting point to be noted here is that they succeeded in

laying the old bogey that the building of a specialized minelayer represents money tied up in a ship which may never be used. In fact, their high speed and large internal carrying capacity rendered them invaluable for the carriage of specialized troops, stores, food, and equipment. The *Latona*, for example, never laid a single mine, and was eventually sunk after a series of 'Tobruk runs' that could not have been successfully carried out by any other type of vessel. Similarly, Malta was probably saved from starvation as a result of the relief afforded by the *Manxman* and the *Welshman* in a series of spectacular and unescorted dashes.

The only other types of surface craft employed by the British to any significant extent in the 1939-45 War for offensive minelaying operations were motor torpedo boats and motor launches, the lineal descendants of the C.M.B.'s and M.L.'s of the previous war. Here, the question of 'conversion' did not arise—all that was required was the shipping of simple mine chutes, which had been designed and manufactured prior to the outbreak of war. Both types of vessel carried out numerous and successful operations off the Dutch, Belgian, and French coasts.

It has already been noted that the advent of radar has rendered it progressively more difficult to operate a surface vessel undetected within measureable distance of an enemy coast, and it must further be noted that the great majority of British operations were carried out at a comparatively short distance from the United Kingdom. It is none the less the writer's personal opinion that the type of vessel represented by the fast minelayers should be perpetuated, and that provision should continue to be made for the conversion of destroyers and the adaptation of motor torpedo boats (or their equivalent) for mine-laying duties.

This opinion is based on the following considerations :—

(a) Fully effective radar cover in all areas may take some time to establish, and even when established it is not beyond the wit of man to organize the movements of minelayers in such a manner that their identity as such is hidden from the enemy.

(b) In some areas, coastal craft may be the only type capable of employment. If they cannot reach the area under their own steam, they can be carried or towed within striking distance by some other vessel (this was frequently done in the case of coastal motor boats in the 1914-18 War.)

(c) Ships of the fast minelayer type are not restricted to use as such, while the ability to adapt other types of war vessel for minelaying purposes need not detract in any way from their availability to exercise their normal functions.

#### THE SUBMARINE MINELAYER

There can be little doubt that the submersible craft is the only true exponent of the principle of evasion, and this fact has been recognized from the earliest days of mine warfare. She can, moreover, carry out her own reconnaissance, and she requires neither escort nor support. It is therefore suggested as being incontrovertible that, *in areas where she can function at all*, the submarine will remain the only type of vessel capable of exploiting the full potentialities of the minefield laid in enemy waters. It is in respect of this particular class of vessel, however, that opinions differ most widely on the question of whether to build specialized craft, or whether to adapt orthodox patrol-type submarines for service as minelayer.

In the 1914-18 War the British followed the practice, adopted by many other countries, of fitting a certain number of submarines with vertical tubes in the saddle-



tanks for the carriage and laying of mines designed specially for the purpose. The principal disadvantage of this system is that the necessary structural alterations have the effect of detracting from the efficiency of the submarine in the performance of her primary role (a point, it will be recalled, which does not arise in the case of the surface war vessel designed for conversion to minelaying duties when required.).

In the year 1930, however, convinced of the strategic value of the offensive minefield and of the superiority of the submarine as a laying agent, the Admiralty approved the construction of six minelaying submarines of the *Porpoise* class, with a capacity of 50 moored mines each, and a very high endurance. These submarines, the first ever to be constructed by the British specifically as minelayers, were, it is believed, originally designed with a view to operations in the eastern theatre (hence their high endurance) and although technically perfect, they proved in the 1939-45 War, to be rather too large and unwieldy for employment in the shallow and restricted waters of the North Sea and Kattegat. None the less, although five of the original six were lost, they performed valuable service in those areas, in the Mediterranean, and in South East Asia.

The position with regard to the adaptation of orthodox patrol class submarines to lay mines was eased by the development of mines capable of being discharged from the torpedo tubes; that is to say, the ability of such submarines to perform their primary task was in no way affected. This arrangement has many advocates, including the present writer. Whether or not there will be a reversion to the policy of building submarines specially designed as minelayers he is not in a position to hazard a guess, as much depends on the circumstances in which the operations are to be carried out.

#### AIRCRAFT MINELAYERS

In the early stages of a minelaying campaign, that is to say, before the enemy system of detection has swung into effective action in all areas, it may be practicable for aircraft minelayers to evade detection. As the campaign progresses, the enemy may be forced to extend and elaborate his systems of detection and anti-aircraft defence, and this added drain on his resources represents one of the indirect effects which constitute such an important feature of mine warfare.

In general, however, the laying of mines by aircraft is an operation which is, to all intents and purposes, incapable of being conducted in complete secrecy. It is for this reason that the design of the aircraft-laid mine, above all other types, calls for the utmost ingenuity, so that (as noted earlier in this paper) the element of surprise is exploited by the mine rather than by the method of laying.

Nevertheless, the aircraft minelayer possesses the following advantages over all other types:—

- (a) large radius of action;
- (b) ability to lay mines in areas which are inaccessible to other types; and
- (c) ability to revisit areas which have already been mined.

These advantages are almost too well-known to merit reference, but the point to be emphasized is that they outweigh the disadvantages to such an extent that the continued employment of aircraft in a minelaying role appears to be assured.

The question of whether or not to develop specialized types of aircraft for minelaying duties is thus of considerable moment. If non-specialized aircraft are to be employed, the design of the mines to be carried may well be prejudiced, observing

that their weight, shape, etc., must of necessity conform to the characteristics of the bombs to be carried by the aircraft in question. It must again be stated (possibly *ad nauseam*) that the need for ingenuity in the design of mines to be laid by aircraft is of more importance than in the case of mines to be laid by submarines.

It can further be argued that there is a case to be made out for the establishment of an 'aircraft mine force', regard being had to the fact that, as compared with a bomber force, there is a fundamental difference in training and technique, and, it may be added, in the temperamental outlook of the aircrews. Once again, this is not so in the case of the submarine minelayer; a submarine operation in enemy waters follows much the same pattern, whether she be laying mines or engaged on a routine patrol.

It was at one time accepted as one of the first principles of mine warfare that the minelayer should be so equipped as to be capable of carrying the most efficient mine, rather than that the mine should be tailored to meet the peculiarities of a particular type of minelayer. The extremely limited extent to which this principle has so far been applied has already been noted and, sound though it may be and powerful though the arguments in favour of specialized aircraft minelayers may appear, the present writer doubts whether in practice higher authority is likely to be persuaded to agree to the permanent locking up of any significant number of aircraft in this manner.

#### CONCLUSIONS

As regards protective operations, the conclusions appear to be :—

(a) That for operations at a distance from a base, sea-keeping qualities, endurance, and mine-carrying capacity are of greater importance than speed, subject to the proviso that the size of the ships employed is not such as to present difficulties in berthing or handling, and that the logistic problems involved in the production, transport, storage, preparation, and embarkation of very large numbers of mines are carefully balanced against the overall effectiveness of the minefields as ultimately laid.

(b) For protective operations at a comparatively short distance from a base, or in restricted waters, sea-keeping qualities and radius of action are of less importance. Navigational restrictions preclude the use of large vessels, but the consequent reduction in mine-carrying capacity can not only be accepted, but may be a positive advantage from the logistic angle. Converted merchant vessels are suitable and, in particular, specialized types such as ferries, etc., but the building of one or more small craft which can be usefully employed on peace-time training and trials is recommended as giving a more than worthwhile return for the money expended.

In all cases where the use of converted merchant vessels is contemplated, it is essential that the necessary plans for such conversion be drawn up in peace-time and that the appropriate equipment be provided and maintained in good order.

With regard to offensive operations, the position is less clear. So far, this paper has been confined to a consideration of factors which are predominantly technical in character; but in the case of offensive operations, it is of some importance to note the influence of the human element.

The laying of mines in enemy waters is a hazardous, unspectacular, and in many cases an unrewarding performance; at the same time, it must be conducted

with a specific object in view, and not merely for the purpose of providing employment for a mine force. The result may well be that periods of supreme boredom will alternate with periods of intense activity; the former are bad for morale, while the latter may result in serious error or even disaster if men handling complex and dangerous pieces of ordnance are not afforded time for adequate rest and recreation.

These factors must, it is suggested, be taken into consideration in deciding on the technical characteristics to be embodied in any type of offensive minelayer. If she can be used for some other purpose when not required for minelaying, boredom and staleness can be alleviated. If she is properly equipped, the effect is to ease the strain on her crew when she is actually laying mines.

With regard to surface vessels, it is held in some quarters that their continued operation throughout the course of a minelaying campaign may in the future prove less feasible than in the past. It is none the less believed that provision should continue to be made for:

- (a) the building of specialized surface craft which can carry out offensive operations *in the most effective manner*, but which can in the alternative be usefully employed on other duties; and
- (b) the adaptation, when required, of other suitable types of surface war vessel for minelaying purposes, without detracting from their ability to perform their normal roles.

With regard to submarines and aircraft, the former remains, and will continue to remain, the true offensive minelayer, and it seems clear that aircraft will continue to be employed in areas to which no other type of minelayer can penetrate.

It is nevertheless the personal view of the writer that the development of specialized minelaying submarines is unnecessary on technical grounds and undesirable from the morale aspect. It would, no doubt, be practicable to build specialized minelaying submarines which could in the alternative be used for the transport of special stores or equipment (certain British submarines of the *Porpoise* class were in fact so employed in the 1939-45 War), but such vessels would, it is believed, prove too large and unwieldy to be capable of carrying out their primary function as minelayers.

With regard to aircraft, the writer must confess that he finds it extremely difficult to prevent his heart from ruling his head. Both the technical and the operational arguments in favour of the establishment of a separate aircraft mine force are at first sight overwhelming; but the weight to be accorded to the human factor is divided with hair-line precision on both sides of the balance. In other words, can the advantages of specialized training and outlook be offset against the deleterious effects of possibly lengthy periods of idleness, imposed by purely strategic considerations, on the lives and minds of men whose natural habitat is the air, and whose natural instincts crave action rather than the planned contemplation of the infinite? The answer must be clearly in the negative, but if (and it is a big 'if') a type of aircraft could be developed which was *primarily* designed for minelaying purposes, but which could in the alternative be employed on other duties (in other words, a 'fast minelayer of the air'), then all problems would be solved.

As this happy outcome appears to be unlikely of achievement, it does not seem worth while to do more than suggest that any relaxation in the restrictions at present imposed on the mine designer through having to conform to the requirements for the carriage and release of bombs would be more than welcome.

Such relaxation would enable the designer to develop more 'intelligent' mines, and so to offset to an increased extent the difficulty experienced by aircraft in laying mines undetected, and so, as between the submarine and the aircraft, to render less significant the aptness of the old Malay proverb which runs:—"The turtle lays a million eggs in silence and secrecy, but when the barn-door fowl lays one egg, the whole countryside hears of it."

To sum up, it is contended that the minelayer, whether surface vessel, submarine, or aircraft, should either be :

- (a) a craft specially built for the purpose, *but not thereby rendered incapable of performing other useful service* ; or
- (b) an orthodox craft, capable of being equipped to lay mines in the most effective manner as and when required, *but not thereby rendered incapable of performing her normal role.*

A policy based on the foregoing contention would, it is submitted, obviate the necessity for the exercise of clairvoyance as to the nature and extent of any future minelaying campaign, and would make the best of both worlds as regards technical efficiency, operational flexibility, and the upkeep of morale. Admittedly, the 'best' might not be available in any particular case, but the well-known pitfall of so organizing affairs that the achievement of the particular 'best' operates to defeat the general 'good' would at least be avoided.

Finally, it cannot be urged too strongly that, whenever security considerations permit, the purpose of the activities of any particular minelaying force, and in due course the results achieved thereby, should be communicated to all concerned. In the final analysis, it is the man who counts, and not the shape, size, colour, cost, or incidental vagaries of the vehicle concerned.



## CRIMEAN COURTS MARTIAL

By LIEUT.-COLONEL M. E. S. LAWS, O.B.E., M.C., R.A. (Retd.), F.R.Hist.S.

THE British Army which fought in the Crimea a century ago was basically the same as that which had won such spectacular victories under Wellington in the Peninsula and at Waterloo. The Crimea was its last great campaign, for after 1856 an entirely new force arose, based indeed on long but not unlimited service, and designed to enable expansion of a comparatively small peacetime cadre to take place on mobilization by the employment of trained reserves. The old Army had many obvious failings but it had won its campaigns largely by reason of its stern discipline, and it is interesting therefore to examine in some detail its disciplinary record in its last years of active service as revealed by the court martial register.

The following table shows the number of courts martial held throughout the whole campaign and the number of non-commissioned officers and men tried. The figures cover in all ten cavalry regiments and 41 infantry battalions; all but one battalion and two cavalry regiments reached the theatre of war by the end of 1854. The Royal Artillery has been included only up till the end of 1854, so that after that date the considerable siege train of some 28 companies, R.A., the Horse Artillery troops, the field batteries, and ball cartridge brigades have been excluded.

Period	COURTS MARTIAL				Number of Men	
	General	District	Regimental	Total	Convicted	Acquitted
1/5 to 31/12/1854 ... ..	8	524	656	1,188	1,263	50
1/1 to 31/3/1855 ... ..	2	246	475	723	622	27
1/4 to 30/6/1855 ... ..	3	415	786	1,204	1,204	48
1/7 to 30/9/1855 ... ..	7	331	837	1,175	1,079	42
1/10 to 31/12/1855 ... ..	7	672	1,459	2,138	2,138	127
1/1 to 31/3/1856 ... ..	5	516	1,219	1,740	1,740	81
1/5/1854 to 31/3/1856 ... ..	32	2,704	5,432	8,168	8,046	375

The first reaction on examining these figures is surprise at the large number of courts martial, but it should be remembered that most of the cases dealt with by regimental courts martial a century ago would today be decided by the commanding officer. It should be noticed also that the number of men brought to trial increased alarmingly in the quarter following the fall of Sebastopol on 8th September, 1855, probably owing to the lessened tension, increased leisure, and greater opportunities for finding liquor and loot. Moreover, by that time the depleted ranks of many regiments were being refilled by young recruits who had not yet had time to settle down.

The following table has been compiled to indicate the nature of the offences which were dealt with by the 8,168 courts martial:—

## CHARGES

Charges	1/5 to	1/1 to	1/4 to	1/7 to	1/10 to	1/1 to	Total
	31/12	31/3	30/6	30/9	31/12	31/3	
	1854	1855	1855	1855	1855	1856	
Mutiny ... ..	0	0	0	0	1	0	1
Desertion ... ..	20	13	28	31	45	29	166
Striking or offering violence to a superior	48	—	25	17	32	24	146
Disobedience ... ..	77	29	54	47	55	48	310
Quitting or sleeping on post	113	97	49	41	83	72	455
Drunk on duty under arms	285	246	233	165	214	185	1,328
Habitual drunkenness ...	107	49	253	264	722	671	2,066
Disgraceful conduct ...	56	34	69	74	103	68	404
Absent without leave ...	166	67	186	217	340	266	1,242
Making away with regimental necessities	50	33	37	41	69	86	316
Drunkenness (not on duty)	—	107	565	360	582	430	2,044
Insubordination ... ..	—	—	—	91	97	74	262
Miscellaneous ... ..	294	100	—	99	213	129	835
TOTALS ... ..	1,216	775	1,499	1,447	2,556	2,082	9,575

*Note :* A blank in the table indicates that no figure is given in the official return.

It will be seen that 8,046 men were punished for 9,575 offences. The fact which is startlingly apparent is that drunkenness was the main failing of the British soldier; habitual drunkenness, drunk on duty under arms, and simple drunkenness not on duty, together account for nearly 57 per cent. of all the cases tried. Furthermore it is clear from a detailed examination of the figures in the court martial register that a large proportion of such other crimes as offering violence to a superior, absent without leave, and making away with regimental necessities were directly or indirectly due to intemperance. The 455 cases of quitting or sleeping on post were to some extent excused by the terrible conditions under which the early part of the campaign was waged, though there was little falling off of these figures as the conditions improved. Again many of these charges arose as the result of men leaving working parties after the fall of Sebastopol to search for liquor or for loot which could conveniently be converted into liquor. The charges of disgraceful conduct were mostly cases of petty theft, while those shown as miscellaneous defy more accurate classification, but were often the result of drunkenness.

A curious feature, which cannot unfortunately be indicated in the table, is the number of cases in which men were charged with "being taken prisoner by the enemy through negligence." In all such cases which could be traced the men were acquitted of a charge which it must have been very difficult to prove even if serious attempts had been made to do so. The only case classed officially as mutiny concerned a soldier who was proved to have "presented a pistol at a superior with intent to murder him." A charge shown under the miscellaneous heading implicated a soldier who was accused of "having three sheep in his possession, the property of an officer."

Having considered the nature of the offences committed by the Crimean Army, it is of interest to analyse the punishments awarded as shown in the following table :—

PUNISHMENTS							
<i>Sentences</i>	1/5 to 31/12 1854	1/1 to 31/3 1855	1/4 to 30/6 1855	1/7 to 30/9 1855	1/10 to 31/12 1855	1/1 to 31/3 1856	<i>Total</i>
Reduction in rank ...	275	89	279	311	536	418	1,908
Solitary confinement ...	0	0	4	7	1	2	14
Imprisonment with or without hard labour	209	64	99	106	854	1,067	2,399
Corporal punishment ...	740	443	747	695	494	105	3,224
Corporal punishment and imprisonment	21	3	4	11	109	91	239
Transportation ...	—	—	—	—	6	1	7
Forfeiture of extra pay and of pension on dis- charge	—	—	—	11	17	12	40
Stoppage of pay, with or without other punish- ment—							
For habitual drunk- enness	0	49	251	255	704	648	1,907
For drunk on duty	0	69	161	122	190	133	675
To replace neces- saries	3	20	38	39	65	78	243
For miscellaneous offences	4	21	4	13	38	28	108
TOTALS ...	1,245	758	1,587	1,570	3,014	2,583	10,764

It should be understood that in this table the expression corporal punishment means flogging with a maximum of 50 lashes. In the early days of the campaign it was usually awarded alone without other punishment, but after mid-1855 there was a definite decrease in the use of the lash, though it became rather more frequently used in conjunction with sentences of imprisonment. The fact remains that over a third of the court martial sentences during the war involved flogging. While corporal punishment began to decrease from the middle of 1855, so the number of men sentenced to imprisonment (with or without hard labour) began to increase, until by the end of the war imprisonment was ten times more frequent than flogging and was by far the commonest sentence passed. It is difficult to account for this change of procedure, but presumably during the earlier stages of the campaign the manpower situation was so acute that imprisonment of fit men was for the time being unacceptable. It was considered preferable to give the culprit a flogging and keep him in the ranks. After active operations ceased in early September, 1855, the conditions were different and there was less objection to the award of imprisonment. Perhaps also there was some popular reaction against corporal punishment of men who had been universally praised for their gallantry and endurance during the tragic Winter of 1854-1855 and the hard fighting round Sebastopol which followed.

Of serious military crime there was really very little. One private was convicted of desertion to the enemy and was sentenced to penal servitude for life; another,

charged with "deserting with intent to go over to the enemy," was sentenced to death by shooting, but this award was commuted to penal servitude for life. Solitary confinement was almost invariably given as part of a longer period of imprisonment and was generally divided into two equal periods to be served one at the beginning and the other at the end of the term of imprisonment. Transportation covered all cases of long terms of penal servitude.

It is clear from the table that the outstanding problem which faced courts martial in the Crimea was how to deal with the habitual drunkard. At first it was evidently considered that a man of that mentality could be deterred only by the infliction of physical pain; later, however, an attempt was made to diminish drinking by cutting off the supply of money, and so the figures for stoppages of pay for habitual drunkards rose to 704 in a quarter. The argument was that if a man was fined he would not be able to buy enough liquor to get him into trouble and on these grounds many officers were strongly opposed to the grant to the Army of sixpence a day field allowance in the Crimea. Too often, however, the lack of cash merely led to further crimes to allow the drunkard to obtain liquor. How serious the matter was is well illustrated by the fact that no fewer than 1,908 non-commissioned officers were reduced in rank during the campaign and in almost all cases the basic cause was drunkenness.

The problem was, of course, largely the outcome of the social and economic conditions of the period, but it does not seem to have occurred to authority that many good soldiers got drunk because liquor—and mostly very bad liquor—was plentifully available and that there was virtually no other alternative for a man who craved to forget for a few moments the terrible hardships of his existence. The attempt to punish by emptying the soldier's pocket rather than by lacerating his back was, however, a sign that some thought was being given to the problem, and it was during and after the Crimean War that constructive efforts to provide the fighting man in the ranks with some creature comforts other than those to be obtained from the bottle were first instituted.



## THE INTERNATIONAL SITUATION<sup>1</sup>

By A. K. CHESTERTON, M.C.

### GENEVA AND AFTER

#### NO UNIFICATION FOR GERMANY

**M**Y notes last quarter were written on the eve of the Geneva 'Summit' Conference: this quarter, as luck would have it, they are written on the eve of further discussions in New York, so that twice running the commentator has to accept the risks inherent in the role of short-term seer. The predictions about Geneva stand up well enough to post-Geneva scrutiny. It was argued then that no solution of the problem of Germany is possible in present circumstances, and no solution was even faintly adumbrated, nor is one likely to emerge from the New York confabulations. The 'spirit of Geneva' may be an invigorating drink—it has certainly created some heady optimism—but it is scarcely potent enough to make either one side or the other indifferent to the dangers of abandoning the present precarious balance, secured at Germany's expense, for an unbalance that might tilt the scales against itself.

Nor is there the least likelihood at present of the two divisions of Germany easing their shared tensions in conformity with the general easement which has resulted from the Soviet Union's change of tactics. Dr. Adenauer has been to Moscow to negotiate for the release of 10,000-odd German prisoners in Russia—all that the Kremlin will admit to holding of the 100,000-odd listed and claimed by the Germans—in return for diplomatic representation and certain other advantages, which the Russians apparently regard as the equivalent of that number of men. This trading in human beings would have seemed shocking to the XIXth Century: to the XXth it is accepted almost without comment. Moscow used strong pressure to try to secure the recognition by Bonn of the East German puppet state, but that was more than Dr. Adenauer's principles would countenance and more than the terms on which he holds the Chancellorship would allow. It must remain a subject of lugubrious speculation whether the Russians will discover any of the remaining 90,000 prisoners should there be a chance of doing a further deal with Bonn in the years ahead.

#### RUSSIAN TACTICS

Some may dispute my use of the phrase 'the Soviet Union's change of tactics,' because there is a disposition in certain circles to regard Moscow's expansive mood as a genuine change of heart. It is curious that so high a hope should survive the recent explicit statement of the Soviet leadership that those miscalculate who imagine that the Communist Party has turned its back on the doctrine of Marx and Lenin. That doctrine, among much else, taught the impossibility of 'peaceful co-existence,' which did not prevent Lenin's largely successful effort, in launching his 'New Economic Policy,' to modify the fierce antagonisms engendered abroad by the Bolshevik excesses. Much the same thing is happening today.

But what of the continuing Communist purpose behind the varying tactics? It is not always fair to quote what a man may have said in times past, but when that man speaks for a movement as coherent and strategically as undeviating as is Communism, common sense suggests that his words should not be totally disregarded.

<sup>1</sup> As deduced from reports up to 1st October.

That is why I direct attention to what Mr. D. Z. Manuilsky, who in 1949 presided over the United Nations Security Council, told the Lenin School of Political Warfare in Moscow 25 years ago. Here is the relevant passage :

" War to the hilt between Communism and Capitalism is inevitable. Today, of course, we are not strong enough to attack. Our time will come in 20 or 30 years. To win we shall need the element of surprise. The bourgeoisie will have to be put to sleep. So we shall be launching the most spectacular peace movement on record. There will be electrifying overtures and unheard-of concessions. The capitalist countries, stupid and decadent, will rejoice to co-operate in their own destruction. They will leap at another chance to be friends. As soon as their guard is down we shall smash them with our clenched fist."

It may be, of course, that on the day he delivered himself of this diatribe Mr. Manuilsky was expressing no more than a vagrant fancy. On the other hand he may have stated the truth. Which explanation is nearer to the Marxist 'Dialectic'? Which more closely accords with what we have seen of Communism at work?

#### DISARMAMENT AND CONTROL

Another prediction last month which has stood up to the event was that Geneva would resolve itself very largely into a committee of ways and means to examine various formulae for the international control and inspection of armaments. The Heads of Governments arrived with due pomp and circumstance, spoke each his carefully prepared piece, and returned whence they came, leaving the Foreign Ministers to try to agree on a basis for the impending talks in New York. It would be inaccurate to say that nothing emerged from the occasion, because what did emerge, as already noted, was the mysterious and not altogether credible 'spirit of Geneva'—a 'spirit' to which the Russians attach so much importance that it would be a mistake to ignore its value in the creating of the right 'atmosphere' for whatever is planned to follow.

There is also the possibility that in the course of the discussions the scheme prepared by Mr. Harold Stassen underwent a certain change, at any rate in its emphasis. The curious phrase 'minimum deterrence,' analyzed in these notes last quarter, does not seem to have survived the conference. In place of it there have been Mr. Stassen's proposals for armament control—what one national newspaper accurately described as "a minutely worked-out plan to exchange blue-prints of military establishments—land, sea, and air forces—and a complete list of military installations." Mr. Stassen's own description of the proposed exchange was that it would cover information on the identification, strength, command structure, and disposition of men, units, and equipment of all major land, sea, and air forces, including organized reserves and para-military forces, and a complete list of military plants, facilities, and installations, with their locations. He continued: "Each nation has recognized the need for ground observers, and these will be stationed at key locations within the other country for the purpose of allowing them to verify the accuracy of the foregoing information, and to give warning of evidence of surprise attack or of mobilization. Each country shall permit unrestricted, but monitored, aerial reconnaissance by visual, photographic, and electronic means by the other country." The American concept, according to Mr. Stassen, is that the United States and Russia would exchange all information relative to military forces and installations which, coupled with measures for verification and surveillance, was

essential to provide against the possibility of unexpected attack. This exchange would be accomplished in progressive steps, as mutually agreed upon by the two Governments. Among the items of information considered essential to guard against sudden attack, which would be sought by an exchange between the two Governments and verified and maintained under surveillance, were: weapons and delivery systems suitable for sudden attack; transport and telecommunications; structure and positioning of armed forces; and additional facilities as mutually agreed upon between the two Governments. Arrangements would be made, Mr. Stassen said, for the posting of observers with operating land, sea, and air forces, at their supporting installations, and at vital points. The number and location of the observers would be agreed upon before the exchange of information, and provisions would be made for changes in the location should the initial arrangements prove to be inadequate. Aerial reconnaissance would be conducted by each inspecting country on an unrestricted, but monitored, basis to augment the efforts of the observers.

The Soviet Union did not extend to the proposals any very enthusiastic welcome, perhaps because it might expose more Russian weakness than strength, whereupon Washington seemed to retreat from the Stassen—or Eisenhower—plan, letting it be known that it would be satisfied with an interim measure which would enable the powers to station observers at the headquarters of each other's striking force so as to give 'early news' of an impending attack. A week or two later, however, Mr. Stassen offered the President 'odds' that the full scheme would be accepted by Moscow. That is where matters stand at the moment of writing.

#### BRITAIN'S POSITION

Some considerations very important for Great Britain arise from these armament control proposals. The difficulties of keeping an adequate watch on whatever may be in process of incubation in the vast Soviet hinterlands are formidable indeed, and justify the wisdom of Mr. Anthony Nutting, Foreign Under-Secretary, when he remarked: "The simple truth, however unwelcome, is that no machinery of control at present conceived can be 100 per cent. effective in ensuring the security of all States against deception and foul play in this nuclear age." Were the control measures devised by Mr. Stassen capable of being '100 per cent. effective,' they would make armed forces redundant and by far the best course would then be to demobilize these forces! The same argument can be applied even to the simple scheme for stationing international observers at the various national striking-force headquarters. In as far as surprise has become of cardinal importance in our atomic age, if the observers managed to keep efficient vigil it follows that they would make impossible the role of the surprise attackers and therefore render futile and ridiculous the maintenance of an attacking force. He would indeed be naive who supposed that disarmament could become as easy as all that. The co-existence of international observers and potential war-makers would unfailingly lead to the creation of a branch of M.I. which would deal exclusively with plans for throwing dust in the eyes of the observers.

The U.S.S.R., and to a lesser extent the U.S.A., being powers based on continental land-masses, would be well able to stage elaborate stratagems to defeat control, whereas nations such as Great Britain would be cruelly handicapped and in the result effectively controlled, without commensurate means of controlling the bigger powers. This being so, and bearing in mind Mr. Nutting's statement that 100 per cent. security against foul play is impossible, one reads with some astonishment the

evaluation, by the New York correspondent of *The Times*, of the British attitude revealed during the preliminary U.N. talks :

"The feeling here is that Marshal Bulganin's letter is disappointing, in that it appears to show no advance on the question of controls. British sources hope that this does not mean that other countries cannot proceed with the Eden, Eisenhower, and other Western proposals which are designed to lead to a general plan of disarmament."

If the correspondent is correctly informed we would appear to be clamouring to be placed in leading-strings, on the off-chance that the Soviet Union may one day submit to a similar restraint. It is permissible to hope—indeed, to feel reasonably sure—that there must be some mistake.

### THE FAR EAST

#### PERIOD OF MINOR BARGAINING

Although Asian affairs were not on the 'Summit' agenda, they have tended in a quite striking way to follow the European pattern. There have been U.S. negotiations with Red China for the release of American prisoners and direct talks between Japanese and Russian representatives in London on matters of common concern, but—as in the West—the major problems remain. It is conceivable that Washington's trade embargo might be modified in return for concessions by Peking, although what Chou En-lai has to offer, short of a surrender on major issues, may not at the moment be very much.

Neither side can climb down over Formosa, while any move to place a Mao Tse-tung representative in the place of Chiang Kai-shek's man on the Security Council would spell political suicide for the American politician bold enough to attempt it. The Security Council issue for Peking is purely one of 'face.' As the Soviet Union possesses the power of veto—however much or however little that may be worth—Chou cannot have any uncontrollable longing to be invested with a second—and redundant—power of veto. Formosa is a different matter. To Chou it is a threat. To Washington it is the central citadel of the outer defences of the United States of America. On such issues there can be no compromise.

#### UNEASINESS IN KOREA

Even if public opinion in America, responsive to some eastern variant of the 'spirit of Geneva,' had been disposed to reconsider U.S. policy on Formosa, which it certainly was not, the official account published by the South Korean Government of the huge Communist build-up in North Korea would have caused a rapid hardening of the American heart. Here are some of the salient features of the report. Since the armistice 48 airfields have been constructed and more than 468 aircraft, 700 vehicles, 2,700 tanks, 46 patrol and guard ships, and 1,320 artillery guns have been brought into North Korea. The air strength of the North Korean Air Force was said to be six air divisions of about 20,000 men, with a total number of about 540 planes of various types, including 270 jet bombers and MIG fighters. The total strength of the Chinese Communist forces still in North Korea is given as 1,200,000, some of whom are working for industry under the guise of civilian workers. The North Korean Army, as a result of intensive recruiting, numbers between 800,000 and 900,000. The South Koreans, after the interrogation of 80 North Koreans in their hands, express their certainty that a second invasion is soon to begin. This belief is not necessarily well-founded. Nobody supposes that so large a force is kept in being for fun, but whether or not it marches will depend, not upon a local decision, but upon Communist grand strategy.



While the blatant evasion of the armistice terms must shatter whatever illusions the West may have entertained of Communist good faith, for some reason difficult to fathom it does not seem to have shattered anybody's faith in 'inspection and control.' The build-up in Korea has been possible only by foxing, or otherwise rendering impossible, the work of the United Nations Commission entrusted with the supervision of the truce. Yet there is an easy confidence that a watch can be kept over every square yard from the River Elbe to the China Seas.

#### INDO-CHINA

The Geneva agreement on Indo-China provided for all Viet Nam elections in July, 1956. Mr. Ngo Dinh Diem now roundly states that there can be no question of his Government's conferring with the Government of North Viet Nam, although this course has been strongly urged upon him by Washington, London, and Paris. *The Times*, describing his stand as 'intransigence,' declares that "he has taken up the mantle of Dr. Syngman Rhee and become the *enfant terrible* of the Far East." As Mr. Diem has every reason to fear that elections which the Communists were able to manipulate in whole or in part would lead to a further extension of the Red empire to embrace South Viet Nam, this judgment would seem to be a little uncomprehending and harsh. Meanwhile Mr. Diem still has a couple of civil wars on his hands.

In Cambodia there has been a quite remarkable development. King Magnus, the adroit and popular monarch in Shaw's *The Apple Cart*, terrified his Ministers by threatening that if there was any more nonsense he would abdicate and head his own political party. This is precisely what Prince Norodom Sihanouk, the former King of Cambodia, has not only threatened but actually done. What is more, his party won every single seat in the recent general elections. Whether or not he has strengthened this internal stability by his outright rejection of Cambodia's links with France, only the march of events will decide.

#### MALAYA AND SINGAPORE

Malaya and Singapore are manifestly set upon the same road as that trodden by Indo-China and Indonesia. In both British territories the leaders of the parties victorious at the recent elections each declared that the constitution which he had been elected to work was in fact 'unworkable.' The Colonial Secretary lent the weight of his authority to ease the position in Singapore, but nobody supposes that his intervention has secured more than a breathing-space. In Malaya the clash may be averted by a series of withdrawals. In both territories independence is no longer regarded as a controversial subject; the debate is rather whether it shall come in four years or only two.

It may be that the Sultan of Johore made the appropriate comment at his jubilee celebrations when he said: "If the British leave Malaya today, the Communists will come tomorrow. It is all very well to clamour for independence, but where are your warships, your planes, and your armies to withstand and repel aggression from the outside? Many British troops get killed, and Britain still continues to send youths to defend this country. But for how long must the British continue to send their men here to be killed? The British came here to help develop Malaya. They made it rich and prosperous. If I were a Britisher I would clear out now and leave Malaya to its fate." The Chief Minister left the festivities in protest, but he did not answer the question.

## THE MIDDLE EAST

### BURAIMI

The British Government has had very good reason to complain of Saudi Arabian manoeuvres with regard to the Buraimi Oasis. According to a Foreign Office statement remarkable for its forthrightness, ever since the setting up of the arbitration tribunal to decide the frontier between Saudi Arabia and the British-protected sheikhdom of Abu Dhabi, there were breaches of the conditions of arbitration. The statement gives details of an attempted *coup d'état* in Abu Dhabi, and speaks of a "campaign of bribery, particularly directed against members of the ruling family of Abu Dhabi." One of the Sheikh's brothers is said to have been promised by the Saudi agent in Buraimi that King Saud would give him some £30,000,000, "if he would prevent the Iraq Petroleum Company from operating in the disputed territories and leave the field open to Aramco." Aramco, of course, is the name of the American oil company holding the concession for Saudi Arabia. Future historians may perhaps examine the Anglo-Persian dispute against a background of intrigue and corruption certainly no less blatant than this one.

### EGYPT

It seems to have come as a shock to some Governments that the Middle Eastern vacuum left by our rapid surrender of the Suez base, and by the West's subsequent disinclination to sell arms to Egypt, should look as though it were about to be filled by Communist influence. Colonel Nasser has announced the signing of an agreement for naval, military, and air force equipment to be provided by Czechoslovakia, and has mentioned an agreement with the Soviet Union, details of which are not known at the time of writing. It might appear that Western policy has been concerned less with its own interests than with Israel's doubts and fears.

### CYPRUS

The former Chief of the Imperial General Staff, vacating his high office some weeks ahead of the normal retiring date, has been hurried to Cyprus to take over the Governorship of that disturbed island. So far the riots have been largely carried out by teenagers throwing stones and bottles. There is evidence that the leader of the Enosis movement, Archbishop Makarios, has been concerting measures with the Communists, and that while in America he was in close touch with a group of wealthy pro-Communist Greeks who had opposed British intervention in Greece at the time of the attempted Red coup. Thus the agitation may receive much financial backing and may take a more ugly complexion before it is brought under control, but there is an abundance of good will for Britons in Cyprus and the task of Sir John Harding in protecting life and property should not present tremendous difficulties.

The attempt by Greece to have the dispute ventilated in the General Assembly of the United Nations was defeated, not so much for love of beautiful British eyes as because of a strong desire not to alienate Turkey, which now occupies the key position in N.A.T.O.'s Middle Eastern defences.

### NORTH AFRICA

The problems facing France in Morocco, Algeria, and Tunisia respectively tend to an increasing extent to become one problem. It would be misleading, therefore, to suggest that the personality of this or that Sultan or the application of this or that

constitutional device can have any real bearing on the future of any one of the territories. Everything short of the outright abandonment by France of her North African interests has been proffered and rejected. Whatever temporary accommodation has been, or will be, reached, the issue that must be determined is the major question of whether France stays or goes. Indeed, recent developments are an expression of this simplification of the problem, notably the link established by the 'Army of Allah' in Algeria with the 'Fighters of Freedom' in Morocco to drive the French out of North Africa. According to Allal el Fassi, the leader of Istiqlal—the Moroccan Nationalist movement—the combined forces have taken the name of 'the Army of Liberation.'

In as far as the opposition to France thus takes firm shape and emerges into the open, the French will probably find the task of coping with it made much easier. Meanwhile the French withdrawal of its delegations to the U.N. Assembly, because of the majority vote to place North Africa on its agenda, should not be taken as more than a gesture of protest. International pressures and inducements are too strong to allow France permanently to renounce the United Nations.

## CORRESPONDENCE

(Correspondence is invited on subjects which have been dealt with in the JOURNAL, or which are of general interest to the Services. Correspondents are requested to put their views as concisely as possible, but publication of letters will be dependent on the space available in each number of the JOURNAL.—EDITOR.)

### THE CHINDIT OPERATIONS OF 1944

To the Editor of the R.U.S.I. JOURNAL.

SIR,—With reference to *The Chindit Operations of 1944* in your May,<sup>1</sup> 1955, issue, I should like to make a few remarks concerning what should have been the Imperial policy lessons of the Burma campaign. I gave many lectures on this campaign between 1942 and 1945 to H.M. Forces in Southern Command and my comments are to be found in my book *War Diary*, especially pages 154–158 and 90–94, this book being in the R.U.S.I. Library.

I consider that the overall strategic fact was that the Burmese campaign was a British victory, won chiefly by the British Army and the old British Indian Army. In early 1944, the stopping of the enemy in the Arakan, the battle of Kohima, after the Japanese had by-passed the advanced troops in Tiddim, and the consequent advance from Kohima to Meiktila, Mandalay, and thence to Rangoon was essentially a British affair. The operations of the Americans in the Myitkyina sector depended throughout on the success of our operations on the right and central sectors. It may be said furthermore that the British victory in Burma, combined with the victory of our Empire troops in New Guinea, was a major factor in winning the war in the Pacific. Only in these two sectors were the Japanese field armies properly beaten.

The lesson, therefore, which was neglected, stands out clearly that India and Burma were vital to our Empire. In the issue, our withdrawal from our eastern Empire, along with that of our Allies from Indonesia, has been followed inevitably by the unbridled expansion of Russia and the new empire of China.

In the same issue Major Reginald Hargreaves writes *re* my letter on the 1841 Afghan campaign in the February, 1955, issue, about Elphinstone, saying with truth that he "took the only course open to him—because he was Elphinstone." This opens up a most interesting subject, which in my letter I did not touch on for reasons of space. Elphinstone was selected for this important command because he was old and infirm and higher authority considered that he would thus be a pliable tool in the hands of the political authorities, who in the event were responsible for the dreadful disaster.

F. A. L. DE GRUCHY,

Major (Retd.)

19th August, 1955.

SIR,—Lieut.-Colonel Mead, in his paper on the Chindit operations in the May, 1955, issue of the R.U.S.I. JOURNAL suggests that I did not give enough prominence to those operations in an article published in the *Army Quarterly* in which I gave a brief and, if I may say so, accurate outline of the war in Burma.

Whatever importance history may in the future ascribe to the Chindit operations, it is a hard mathematical fact that they only took up about five 'division months' out of a total for the campaign of approximately 250, and did not take any direct part in the decisive battles fought in 1944 in North Arakan, Imphal, and Kohima, except for 23 Brigade which operated under orders of XXXIII Corps.

There are several divisions which can claim about 20 'division months' and one—17 Indian Division—which can claim close on 40 in close contact with the enemy, and it is unavoidable that they should receive more space in a paper covering the whole campaign.

<sup>1</sup> Page 251.



That examiners have had cause to remark on the ignorance of candidates on the subject of the Chindit operations emphasizes sharply the lack of knowledge of the Burma campaign generally, because more has been written on the subject of the Chindit operations than on the whole of the rest of the war in Burma.

That being so, it is a pity that the writer has, in an obviously carefully compiled and interesting paper, made some major errors in his description of the 'background' against which the Chindit operations took place. As his object is, to use his own words, 'to dissipate ignorance,' these errors should be rectified as they tend to give a wrong impression of the operations of the Army in Burma and in fact hint at a hesitancy and lack of drive in more than one instance. Any such hint is hardly fair to forces that were about to inflict a disastrous defeat on an enterprising and fanatically—I use the word advisedly—brave enemy.

It is quite wrong to say that, in January, 1944, IV Corps occupied the Imphal plain patrolling forward to the Chindwin. Of its three divisions, one was in the Kennedy Peak-Tiddim area with its rear elements 120 mountainous miles forward of the nearest point on the plain, one was in the Kabaw valley and on the Chindwin, also far from the plain, and only the reserve division, resting and training, was on the plain. It is also wrong to say that XV Corps was 'cautiously moving south towards Akyab.' That Corps was, in January, mounting a deliberate attack on the most formidable defended area the Japanese ever constructed in Burma, and called by them 'The Golden Fortress of the Mayu Range.'

The alleged 200,000 strong Chinese (Yunnan) force was assessed by the Americans—who ought to know as they looked after it—at about 72,000, and was, in spite of all General Stilwell's efforts to get it to advance, very reluctant to leave its mountain fastness east of the Salween.

Again, near the end of the paper the statement that 'In December, when the IVth and XXXIIIrd Corps reached the Chindwin, 36th Division was in Indaw and Katha' is quite wrong. The Chindwin was reached by XXXIII Corps in the first week in September and from then on had patrols on and across the river. The 19th Division of IV Corps crossed the Chindwin in November and by 10th December, when the first patrols of 36th Division were entering Indaw and Katha, the leading troops of 19th Division were some 50 miles east of the Chindwin and its patrols made contact with 36th Division near Indaw on 15th December, at a point over 100 road miles from the nearest point on the Chindwin.

At what stage the Japanese high command decided to fall back behind the Irrawaddy can only be known when the Japanese documents have been studied. But it is an unquestionable fact that by the time Myitkyina fell the Japanese had suffered a major and disastrous defeat on the Imphal plain; the remnants of the 15th Japanese Army were in full retreat across the Chindwin and quite unable to defend it anywhere north of Kalewa, which they were able to hold on to till the end of November largely owing to the intervention of the monsoon which flooded the Kabaw valley, completely stopping the advance of the division there and making the advance of the division on the Tiddim road one of almost insurmountable difficulty. It is therefore questionable to ascribe the easy crossing of the Chindwin by the 14th Army to the fall of Myitkyina, with its garrison of about regimental strength, and Mogaung, with its still smaller garrison.

Among the lessons, it is said that we do not appear to have learned that air support should be close and intimate, and yet, long before the second Chindit expedition, R.A.F. pilots used to visit forward brigades—including mine—to examine from ground O.P.'s at short range the targets they were to bomb. In Malaya today the Army and R.A.F. live in each other's pockets.

Lastly, a reference is made to the abandonment of the Wingate plan. Colonel Bernard Fergusson in his book also talks of a change of plan, but no one has yet given any account of what this change of plan was.

The first, and eventually only, task of the second Chindit expedition was to help General Stilwell to take Myitkyina, as is stated correctly by Lieut.-Colonel Mead. This task was never changed and in fact eventually the Chindits were placed under Stilwell's command, and some of the many troubles which followed are described in Calvert's *Prisoners of Hope*. Is it suggested that the task was to be achieved by threatening rather than by fighting? If so, the answer is that no one in war ever got anything from the Japanese without hard fighting.

No one would wish to detract from the Chindit's fine performance, but we must view it in its true perspective, and against an accurate background.

In the correspondence section of the JOURNAL for August, 1955, Major Toye suggests that it is unfortunate that Lieut.-Colonel Mead's article did not sufficiently stress the effect of the Chindit operations on the Japanese.

To attempt to assess the effect of them on the enemy would be very unwise until the Japanese documents on the subject have been studied, and Major Toye's attempt to do so is not very convincing. To start with, his statement that one of the Japanese divisions taking part in the Imphal battle was based in Indaw is open to considerable doubt. The four effects he goes on to enumerate will require a good deal of substantiating and should not at present be accepted. To take them one by one:—

(a) If it is true that the whole Japanese command was thrown into uncertainty and took a long time to find out the extent and position of the Chindit thrust, one can only say that they assembled a force to oppose it with almost unbelievable speed. Moreover, the Imphal offensive went on, as far as one can judge on present evidence, completely according to plan and without any sign whatever of uncertainty.

(b) There was so little interception of the Chindit air lift that the statement that almost the whole of the air effort intended for Imphal was drawn off to oppose the Chindits must be viewed with considerable doubt. As to ground reserves, our own identifications indicate that only one infantry and one artillery battalion was held back from 15th Army reserves for a very short time. The Japanese 53rd Division was brought in (less one regiment until much later) and its headquarters and one regiment sent to the Chindit sector and the other, less a battalion, to the Imphal front. It is at least possible that it was brought in to deal with the Chindits and part of it deflected to the Imphal front—we don't yet know the real truth.

(c) The main Japanese L of C was via Shwebo-Kalewa and the Chindwin, and this route gave access to the rear areas of every division of the Japanese 15th Army via the Chindwin and motorable tracks in the Kabaw valley. Our advance in December showed very clearly that the routes from Indaw or Pinlebu to the Chindwin were quite incapable of maintaining forces of any size except in good weather. Besides, why should the Japanese use these roundabout routes when they had a direct one via Kalewa? There is evidence to support the idea that the Japanese intended to abandon the northern routes as soon as they had gained control of the Kabaw valley, but this will require corroboration before it can be fully accepted. The northern divisions starved because the Japanese failed to get control of the all-weather road across the Imphal plain, a factor which figured very prominently in General Slim's appreciation before the enemy offensive had even started, and not because of damage done in March at Pinlebu or Wuntho.

It is definitely wrong to say that the northern divisions got no reinforcements. Amongst other things, an I.N.A. regiment reinforced the Kohima sector quite late in the battle.

(d) The delay in the move of 15th Army headquarters was not due to any physical difficulty for they had a clear route via Shwebo. They awaited the taking over of the northern front by the newly formed 33rd Army Headquarters. A study of the campaign will show that Japanese Army headquarters were quite happy to

remain at great distances from the front. For example, 28th Army controlled the Arakan front but did not move to Arakan in 1944, even though there was a major offensive in progress there and no fighting anywhere else in its sector.

The statement that all three divisional commanders of the 15th Army had to be replaced is not only misleading but incorrect. Commander 33 Division was the only one replaced in the early stages of the battle. Commander 15 Division died considerably later. Commander 31 Division was not replaced until the battle was over.

Finally, Major Toye forgets that the task of the Chindits was not that of assisting 14th Army, but of helping General Stilwell to capture Myitkyina. In late March, General Slim for a time contemplated ordering the Chindits to turn west and attack the Japanese 15th Army in rear but finally decided against it. The Chindits task was to cut the L of C to the north. They were never near the 15th Army main L of C so it is difficult to see how their operations could possibly have had a decisive effect on the Imphal battle. They had some effect, of course, possibly even a considerable effect, but that has yet to be ascertained.

M. R. ROBERTS,

10th September, 1955.

Brigadier.

#### FIRST USE OF AIR OBSERVATION OF ARTILLERY FIRE

SIR,—In reply to Brigadier-General J. E. Edmond's query as to the first appearance of a military balloon<sup>2</sup>, one such made its bow, on the French side, at the battle of Fleurus, 26th June, 1794. The Gallic observer, having made his survey of the Allied positions, wrote his report, which was lowered in a bag; the latter being returned for further instalments of intelligence by a 'trick-line' attached to the balloon cable.

I possess a crude contemporary woodcut of the action, by Pellein, depicting the opposing lines, with the balloon as a prominent object in the middle distance.

REGINALD HARGREAVES,

30th August, 1955.

Major (Retd.)

SIR,—In the letter headed "First use of Air Observation of Artillery Fire" in your August number, reference is made to "the fire of the successful naval Long Toms in the siege of Ladysmith."

I was with what is now 32 (Minden) Light A.A.Bty., R.A. when it took over the naval 4.7's immediately after the relief of Ladysmith, and I am quite certain that they were not then, and that they never were during the South African War, referred to as 'Long Toms.' That term was exclusively and habitually used by everybody when referring to the Boer heavy gun, approximately a 6-inch, I think. Admittedly this is not a matter of much importance but possibly a point of minor historical interest.

G. P. MACCLELLAN,

7th September, 1955.

Lieut.-Colonel (Retd.)

SIR,—I was very interested in Brigadier-General J. E. Edmond's letter on the above subject and his request for information on any earlier occasions when such aerial observations were made under battle conditions. I have in my collection a book published by Boussod et Cie of Paris about the end of the XIXth Century entitled *Adventures de Guerre, 1792-1809*, edited by Frederic Masson. Pages 43 to 69 describe in detail the formation of a balloon corps, its establishment, training, buildings, furnaces for making gas, mooring systems, preliminary experimental ascents, etc.

Neither the French nor ourselves at that period had any fully organized corps for transport purposes such as the present day R.A.S.C.; consequently everything had to be dismantled and packed into farm carts with hired civilian drivers. This naturally presented some difficulties when handling the delicate balloon fabric.

<sup>2</sup> See JOURNAL for August, 1955, p. 464.

It appears to have been used in the first Austrian campaign with some success, but information about its use in subsequent campaigns is scanty, although I believe an observation balloon was used behind the French lines at Waterloo. The article is beautifully illustrated by coloured drawings by F. de Mybach. M. le Baron de Selle recounts his personal experiences in the Corps from its beginning.

THOS. J. OFFER,

*Lieutenant-Commander (Retd.)*

17th September, 1955.

### LORD WARDEN

SIR,—Mr. Stone might have gone back a little further in his article *Lord Warden*.<sup>3</sup> In the dining room of Constable's Tower in Dover Castle there is an official list of the known Constables of the Castle together with their coats of arms. The first eight Constables were before coats of arms, or their equivalent, became hereditary.

When the appointment of Lord Warden was created it was combined with that of Constable; I believe that the full title is "Lord Warden of the Cinque Ports and Constable of Dover Castle." Certainly in the list no distinction is made between Constables and Lords Warden. The first holder of the office on record was Earl Godwin, who gave his name to the Goodwin Sands, the second was King Harold, who was killed at Hastings; quite a while before Mr. Stone's Edward I.

Dover Castle was started by the Romans who built a lighthouse (known as the Pharos and still standing in the castle), together with a barrackroom to house the garrison responsible for the light, the whole surrounded by the usual fort. The church of St. Mary in the Castle is built on the site of the barrackroom and much of the lower courses consist of the original Roman bricks.

After the Romans left, the fort was occupied by the Jutes, who enlarged it; by the church and inside the fort are the remains of the cell of one of the early Christian monks. Later again, this fort was taken over by the Normans who built the Keep; the well in the Keep is about 400 feet deep and lined with stone from Caen.

Since the castle in one form or another has been in practically continuous military occupation since the time of the Roman invasion, say 2,000 years ago, it must be one of the oldest, if not the oldest, buildings in the world which has been in continuous occupation.

The Roman fort was small, the Jutish somewhat larger, the original Norman Castle larger still. After that each Constable proceeded to enlarge and strengthen his perimeter until the present form of the walls and moats was reached. Each guard tower along the outer wall is still known by the name of the knight responsible for the defence of that sector.

The castle is a flag-flying station and the Union flag was flown during the hours of daylight every day of the war in full view of the Germans after they reached the French coast. The flag is only hauled down for two people, the Monarch and the Lord Warden, when it is replaced by the Royal Standard or the Lord Warden's flag when either come into the command. On the two occasions when H.M. King George VI came to inspect the command during the war his Standard was flown from the Keep. It was as big as a carpet (the Navy had to rig extra stays to the mast) and must have looked even bigger to the Germans.

Few people seem to realize that the castle was under direct observation from the other side, as indeed the German gun positions were from ours. We could see the guns fire 19 seconds (if my memory serves) before the shells arrived; it seemed a long time anyway.

T. L. WALL,

5th September, 1955.

*Major.*

<sup>3</sup> See JOURNAL for August, 1955, p. 415.



SIR,—In two successive articles in the August JOURNAL are given two entirely different reasons for the absence of the English Fleet from the Channel at the time of William the Conqueror's successful crossing. At the top of page 408 it is said that the men who manned the ships had had to go home to slaughter the cattle for the Winter. On page 417 it is stated that the fleet had gone north to intercept the Norsemen. The former is presumably correct, as it is supported by the Saxon Chronicle.

The dilemma which faced the Saxons brings to mind an incident in East Anglia during the last war. An exercise was being held in conjunction with the Home Guard. 'Enemy' forces made a considerable advance shortly after dawn through an apparently undefended countryside, and were somewhat shaken by having their administrative echelons ambushed by strongly defended posts which appeared in their rear. The men who manned the posts had just returned from the milking!

D. C. CAMERON,  
*Lieut.-Colonel, R.E.*

19th September, 1955.

#### FLIGHT REFUELLING AND THE V-BOMBERS

SIR,—In my article in the August number of the R.U.S.I. JOURNAL, reference is made to the American B-45 bomber on pages 434 and 435, once on each page. B-45 should read B-47, the Stratojet.

NORMAN MACMILLAN,  
*Captain*

10th September, 1955.

#### FIGHTING FORMATIONS OF THE FUTURE

SIR,—Major Jackson is to be congratulated on a very readable and thought-provoking article in the May JOURNAL.<sup>4</sup> I suggest that his proposals can be taken one stage further, as follows. American terms have been used for convenience but the nomenclature is unimportant.

The basic unit will be the 'team' of light battalion strength, specializing in one or more of the major tasks in an atomic war. There will be 'combat', 'ground assault', 'air assault', 'engineer assault' and 'missile' teams—to name a few. All 'teams' will be capable of assuming a defensive role. 'Teams' will be combined into task forces capable of applying maximum balanced fire power and adapted to meet the demands of the current situation. One or more 'support teams' will be allocated to a task force and will be responsible for all maintenance and supply. All aspects of the vital and difficult problem of mobility will need thorough consideration.

Task forces will be combined into armies of variable size and composition. The army commander will have direct control over regrouping, thus ensuring maximum speed and flexibility. Armies will be allocated to the supreme theatre commander who will have control of all forces in the theatre.

It can be seen that formations and headquarters, such as the present day division and corps, do not feature in this scheme. Armies will be compact and hard hitting, though sufficiently dispersed so as not to present worthwhile atomic targets.

Finally, it is suggested that the heavy tank, like the battleship, is outmoded, being too vulnerable and cumbersome for modern war.

P. D. T. HAWKER,  
*Major, R.E.*

16th September, 1955.

#### THE LURE OF THE RED COAT

SIR,—I should like to assure Major C. F. C. Letts<sup>5</sup> that I possess a copy of *Recollections of Rifleman Harris* and that his memory has not failed him. I have looked up the details of the incident. Only in one small point does it differ from his account.

<sup>4</sup> Page 229.

<sup>5</sup> See JOURNAL for August, 1955, p. 465.

Harris mentioned that he saw the husband and wife sink by the roadside, as it was getting dark, from complete exhaustion and he and his companions never expected to see them again. It was not 24 hours afterwards, but next morning that they overtook the rearguard column and continued with it until they eventually reached Corunna. Their endurance of such awful conditions as they were exposed to on this retreat is without parallel. I have several other books written by survivors of this terrible retreat, and it is recorded that one or two other women survived and boarded the ships at Corunna.

THOS. J. OFFER,

17th September, 1955.

Lieutenant-Commander (Retd.)

SIR,—Your August number is full of fascinating material. May I make a comment or two on some points in it? The Alcock and Brown flight of 1919 is still generally overlooked in the U.S.A. Most of their writers think that Lindbergh was the first man to cross. I do not believe the truth will ever catch up.

In writing of Charles I and his effort to restore the fleet, it should not be forgotten that the 'ship money' policy was tied up with his determination to dispense with Parliament and establish a royal autocracy.

I am afraid Group Captain Carslaw's ideas of Napoleon's Russian campaign are wildly off the mark. That the Grand Army in Russia was "perfectly fed" is the precise opposite of the truth. Napoleon's complete failure in the matter of supply and transport was the most glaring in his career. It was shortage of food and forage, not typhus, that destroyed the Grand Army. "Decimated" is a curious word to use when "almost destroyed" was the truth.

It is not true that in the Civil War the North employed 'political generals' until they were forced to turn to the West Pointers. From first to last the leading northern generals were nearly all West Point men, just as the southern generals were. Scott, McDowell, McClellan, Burnside, Hooker, Meade, Grant, Sheridan, Sherman, and Thomas were all West Point men, just as Lee and Jackson and the two Johnstons, Beauregard, Longstreet, Ewell, Early, and Stuart had the same training. Both sides suffered from a few 'political' generals, but they were never very important.

IAN MACALISTER.

10th September, 1955.

## GENERAL SERVICE NOTES

### NORTH ATLANTIC TREATY ORGANIZATION

**DEPUTY ALLIED SUPREME COMMANDER, ATLANTIC.**—Vice-Admiral J. W. M. Eaton, C.B., D.S.O., D.S.C., has been appointed Deputy Allied Supreme Commander, Atlantic, in succession to Vice-Admiral Sir John F. Stevens, K.B.E., C.B., with effect from late October.

**EXERCISE "LONG SWELL."**—This exercise, involving N.A.T.O. naval and air forces under the command of Admiral Sir Michael Denny and Air Chief Marshal Sir John Boothman, took place in the North Sea early in July. On its conclusion, 19 ships of the British, Netherlands, Norwegian, and United States Navies assembled at Rosyth from 7th to 12th July.

**EXERCISE "LIFELINE."**—A large-scale staff exercise was held from 21st September to 1st October to test the organization of the passage of convoys from the United States to Europe. In addition to the staff of the Atlantic Command, those of the Europe and Channel Commands also took part. Although no actual naval or merchant ships were involved, detailed orders containing the names of real ships were issued and arrangements made for the reception and discharging of cargoes, allowing for the fact that atomic bombardment could be expected. The exercise was also designed as an important test of communications.

**SOUTH EUROPEAN TASK FORCE.**—It was announced by Supreme Allied Headquarters, Paris, on 11th September, that a new army group, known as South European Task Force, is being formed from American troops leaving Austria under the terms of the State Treaty. The new force, some 5,000 strong, will be commanded by Brigadier-General J. H. Michelis and will be stationed in northern Italy as part of the Southern Europe land command.

### SOUTH-EAST ASIA

#### MILITARY CONFERENCES

A conference of military representatives of the eight member countries of the South-East Asia Treaty Organization was held at Baguio in the Philippines from 25th April to 5th May. The conference was held *in camera*, and an official announcement explained that the recommendations adopted would be submitted to a meeting of the military advisers to be held in Bangkok.

The meeting of the military advisers took place in Bangkok from 6th–8th July. The S.E.A.T.O. Secretariat announced that the talks were solely of a defensive character; that they were concerned with preparatory measures necessary to ensure the collective defence of the treaty area; and that they had taken place separate from, but in close co-ordination with, similar discussions on non-military matters.

### GREAT BRITAIN

#### GUIDED WEAPONS RANGE IN THE HEBRIDES

It was announced by Mr. Selwyn Lloyd, the Minister of Defence, on 27th July that the Government had decided to establish a guided weapons range in the Hebrides and that the launching base would be on the island of South Uist in the Outer Hebrides.

On the authority of The Queen, the islet of Rockall, 250 miles west of the Hebrides, was formally annexed to the United Kingdom by a landing party from H.M.S. *Vidal* (Commander R. H. Connell, D.S.C., R.N.) on 18th September. An Admiralty announcement stated that the annexation was necessary since Rockall was within the sector of the sea which was likely to be within the orbit of the projected guided weapons range in the Hebrides.

**DOMINIONS AND COLONIES****PAKISTAN****ADHERENCE TO TURKISH-IRAQI PACT**

On 1st July, Mr. Mohammed Ali, the Prime Minister, announced that Pakistan had decided to accede to the Turkish-Iraqi defence pact. An invitation to Pakistan to adhere to the pact had been sent by the Governments of Turkey and Iraq on 4th April, the date on which the United Kingdom joined the pact.

**INDIA****DEFENCE PRODUCTION BOARD**

On 20th August, it was announced in New Delhi that the Government of India had decided to set up a Defence Production Board to take over the management of all Indian ordnance factories, to co-ordinate research and development in the three armed Services, and to secure effective liaison with civil industry to meet defence requirements.

**MALTA****DEFENCE EXERCISE**

This year's defence of Malta exercise was carried out in two phases: the preliminary and positioning phase which took place between the 1st and 17th, and the assault phase which occurred between 18th and 20th July.

The attacking force comprised: R.A.F. bombers from North Africa; a seaborne task force of the U.S. 6th Fleet, deploying assault aircraft against harbour, airfield, civil, and technical targets on the island; Italian aircraft, in the working-up phases only; H.M. submarines *Tudor* and *Trenchant*; R.N. fast patrol boats; R.N. frogmen with limpet mines; raiding parties of No. 40 Commando, Royal Marines; R.A.S.C. launches; and the 1st Battalion, King's Own Malta Regiment.

The defending force was as follows: aircraft flown from H.M.S. *Eagle*; helicopters and light vessels of the Royal Navy; No. 3 Commando, Royal Marines; heavy and light anti-aircraft and coastal batteries of the Royal and Royal Malta Artillery; all army units based in Malta; fighter aircraft of the Royal Navy, the Royal Air Force, the United States, and France; Malta R.A.F. Fighter Sector, reinforced from Fighter Command to full wartime operational manning; W.R.A.F. Volunteer Reserve (Malta); and Malta's civil defence, mine-watching, and bomb disposal services.

A simulated atom bomb was dropped on Malta. In fact, the aircraft carrying this 'bomb' was intercepted by a night fighter of the R.A.F. before it could reach its objective, but for the purpose of the civil defence test it was allowed to proceed and release the flare which indicated the bomb. The civil defence services dealt with several hundred 'casualties,' and over 700 sorties were flown by British, American, French, and Italian aircraft.

**FOREIGN****ALBANIA****REDUCTION IN ARMED FORCES**

Albania is to reduce her armed forces by 9,000 men by the end of the year, according to an Albanian Telegraph Agency report from Tirana.

**AUSTRIA**

**RESTORATION OF INDEPENDENCE.**—The Austrian State Treaty, which was signed in Vienna on 15th May, came into force on 27th July when the French instrument of ratification was deposited in Moscow. Instruments of ratification had been deposited previously by the British, Soviet, and United States Governments. On 27th July, the Allied Control Council held its final meeting and formally dissolved itself after passing a resolution expressing to the Austrian people and Government its best wishes for future prosperity in conditions of freedom and peace.



**FEDERAL CHANCELLOR RESPONSIBLE FOR DEFENCE MATTERS.**—On 23rd June, the Federal Council or Upper House of the Austrian Parliament passed a Government Bill placing defence matters under the responsibility of the Federal Chancellor and making the new National Defence Office a special department of the Federal Chancellery.

## BURMA

### DEFENCE SERVICES ACADEMY

On 14th February, the Burmese Prime Minister, U Nu, inaugurated a Burmese Defence Services Academy and a Burmese Army Combat Forces School, both of which are situated at Ba-Htoo-Myo, in the southern Shan States.

## CAMBODIA

### MILITARY AID AGREEMENT WITH THE UNITED STATES

A military aid agreement was signed at Pnom-Penh between Cambodia and the United States on 16th May. The State Department in Washington said that it had become necessary because U.S. aid to Cambodia was now supplied direct and no longer through the French Government, and that the agreement envisaged the setting up of a U.S. military advisory group in Cambodia.

## CZECHOSLOVAKIA

**ACCESSION TO AUSTRIAN STATE TREATY.**—A meeting of the Czechoslovak National Assembly on 30th August unanimously approved the accession of Czechoslovakia to the Austrian State Treaty. Article 37 of the treaty invited members of the United Nations who were at war with Germany on 8th May, 1945, to accede to the treaty, and Czechoslovakia was the first country, other than the original signatories, to do so.

**REDUCTION IN ARMED FORCES.**—On 24th August, Prague Radio announced that the Czechoslovak armed forces would be reduced by 34,000 men by the end of the year.

## HUNGARY

### REDUCTION IN ARMED FORCES

On 7th September, the Hungarian Government announced its decision to reduce the armed forces by 20,000 men by the end of the year. Under the Hungarian Peace Treaty the Hungarian Army may not exceed 55,000 men, but the Hungarian armed forces are estimated to total between 200,000 and 250,000 men.

## JAPAN

### NEW HEAD OF DEFENCE BOARD

The Japanese Government nominated Mr. Shigemasa Sunada as head of the Japanese Defence Board on 31st July.

## PHILIPPINES

### MILITARY AID FROM THE UNITED STATES

An agreement was signed in Manila on 27th April for U.S. aid in equipping and training a new Philippine Army division. Based on the U.S.-Philippine mutual defence pact, it stipulated that the U.S.A. would make a grant-in-aid of \$9,500,000 to be used for constructing a cantonment area for training the new division and for improving an air base in Bulacan province, north of Manila.

## POLAND

### REDUCTION IN ARMED FORCES

According to Warsaw Radio, it was decided at a Cabinet Meeting on 3rd September that Poland would reduce her forces by 47,000 men by 20th December.

**RUSSIA****REDUCTION IN ARMED FORCES**

It was announced in Moscow on 13th August that the Soviet Government had decided to reduce the strength of the armed forces of the Soviet Union by 640,000 men by 15th December.

**RUMANIA**

**RETENTION OF SOVIET TROOPS.**—On 12th August, the Rumanian Prime Minister, M. Gheorghiu-Dej, announced that Soviet troops would continue to be stationed in Rumania after the withdrawal of Russian occupation forces from Austria. He said that although the Soviet Union, under the Rumanian Peace Treaty, was permitted to keep troops in Rumania only as long as they were required to maintain lines of communication with the Soviet forces in Austria, the situation had changed because of the signing of the Paris Agreements and the revival of German militarism. Soviet forces would, therefore, remain in the country until the withdrawal of "foreign forces" from Western Europe and the dissolution of the N.A.T.O.

**REDUCTION IN ARMED FORCES.**—The Rumanian Government announced on 30th August that the strength of the Rumanian armed forces would be reduced by 40,000 by 1st December owing to the recent relaxation of international tension. Under the Rumanian Peace Treaty, Rumanian forces are limited to 125,000 men, but they are believed to number considerably more than this.

**UNITED STATES**

**DEFENCE APPROPRIATIONS.**—The House of Representatives unanimously approved a Bill on 12th May appropriating \$31,488,206,000 for the armed forces in the fiscal year 1955-56 and in so doing agreed to some proposed cuts in the armed forces already announced by the Administration. On 14th June, the Senate passed a Bill appropriating \$31,836,521,336 and adopted an amendment designed to keep the strength of the Marine Corps at 215,000 men and to appropriate \$46,394,390 for this purpose. The Senate also added a further \$356,000,000 to increase the production of the B-52 inter-continental bomber. A Senate-House conference committee agreed to the Senate additions and to certain other increases, the amount finally agreed upon being \$31,882,815,726. The main items were \$9,118,179,556 for the Navy and Marine Corps, \$7,329,953,000 for the Army, and \$14,739,763,170 for the Air Force. After its final passage, the Bill was signed by the President on 13th July. Mr. Wilson, the Secretary of Defence, announced on 14th July that he was impounding the additional \$46,394,390 voted for the Marine Corps and that the Corps would continue to be reduced in accordance with the Administration's original decision.

**ATOMIC ENERGY CO-OPERATION AGREEMENTS.**—On 20th June, President Eisenhower announced that two agreements on co-operation in the civil and military uses of atomic energy had been concluded with the United Kingdom on 15th June; that the civil agreement would run for ten years; and that the military agreement would remain in force until terminated by mutual consent.

Under the terms of the proposed agreement, the U.S.A. may exchange with the United Kingdom atomic information which the U.S.A. considers necessary to: (1) the development of defence plans; (2) the training of personnel in the employment of, and defence against, atomic weapons; (3) the evaluation of the capabilities of potential enemies in the employment of atomic weapons. The United Kingdom would make atomic information available to the U.S.A. on the same basis.

Military and civil agreements with Canada, similar to those concluded between the United Kingdom and the United States, were announced in Washington on 20th June.

## NAVY NOTES GREAT BRITAIN

### H.M. THE QUEEN

After being present at Cowes Week with the Duke of Edinburgh, the Royal yacht *Britannia* embarked the Duke of Cornwall and Princess Anne at Spithead on 5th August. The yacht left for Neyland, Pembrokeshire, where The Queen and the Duke of Edinburgh joined her for their visits to Wales, the Isle of Man, and Scotland. Ships of the Royal Naval Volunteer Reserve formed part of the escort for the yacht. The Queen and the Royal party disembarked at Aberdeen for Balmoral.

**AIDES-DE-CAMP.**—The following officers have been appointed Naval Aides-de-Camp to The Queen from 7th July, 1955 :—

Captain A. C. G. Ermen, in succession to Captain Sir St. John R. J. Tyrwhitt, Bt., D.S.O., D.S.C., promoted to Flag rank.

Captain P. S. Welby, D.S.O., in succession to Captain D. G. F. W. Macintyre, D.S.O., D.S.C.

Captain E. H. Thomas, D.S.C., in succession to Captain R. T. White, D.S.O.

Captain (Commodore Second Class) P. L. Collard, in succession to Captain J. E. H. McBeath, D.S.O., D.S.C., promoted to Flag rank.

Captain J. D. Shaw-Hamilton, in succession to Captain U. H. R. James, C.B.E.

Captain (Commodore First Class) A. H. Thorold, O.B.E., D.S.C., in succession to Captain W. W. R. Bentinck, O.B.E.

Captain S. J. S. Boord, in succession to Captain P. H. E. Welby-Everard, D.S.C.

Captain J. E. Slaughter, D.S.O., in succession to Captain (Commodore Second Class) Sir Charles E. Madden, Bt., C.B., promoted to Flag rank.

On 2nd September, it was announced that Captain J. D. Crossman, C.B.E., had been appointed a Naval Aide-de-Camp to The Queen in place of Rear-Admiral K. H. T. Peard, C.B.E., with effect from 17th August, 1955.

Colonel (Acting Brigadier) I. H. Riches, D.S.O., R.M., has been appointed a Royal Marine Aide-de-Camp to The Queen in place of Colonel M. Archdall, C.B.E., A.D.C., with effect from 20th August, 1955.

**HONORARY PHYSICIANS AND SURGEON.**—Surgeon Rear-Admiral D. Duncan, O.B.E., has been appointed an Honorary Physician to The Queen with effect from 31st March, 1955, in succession to Surgeon Rear-Admiral R. W. Mussen, C.B., C.B.E. Surgeon Rear-Admiral E. T. S. Rudd, C.B.E., has been appointed an Honorary Surgeon to The Queen with effect from 5th April, 1955, in succession to Surgeon Captain A. H. Harkins. Surgeon Captain J. V. Williams has been appointed an Honorary Physician to The Queen with effect from 30th June, 1955, in succession to Surgeon Rear-Admiral J. Hamilton, C.B., C.B.E., placed on the retired list.

### BOARD OF ADMIRALTY

The Queen has been pleased by Letters Patent under the Great Seal bearing date the 12th day of September, 1955, to appoint the following to be Commissioners for executing the Office of Lord High Admiral of the United Kingdom :—

The Rt. Hon. James P. L. Thomas.

Admiral the Rt. Hon. Earl Mountbatten of Burma, K.G., P.C., G.C.S.I., G.C.I.E., G.C.V.O., G.C.B., D.S.O.

Admiral the Hon. Sir Guy H. E. Russell, G.B.E., K.C.B., D.S.O.

Admiral Sir Ralph A. B. Edwards, K.C.B., C.B.E.

Rear-Admiral R. D. Watson, C.B.E.

Rear-Admiral A. N. C. Bingley, O.B.E.  
 Vice-Admiral W. W. Davis, C.B., D.S.O.  
 Vice-Admiral E. G. A. Clifford, C.B., C.B.E.  
 Commander A. H. P. Noble, D.S.O., D.S.C.  
 Kenelm S. D. Wingfield Digby, Esq.  
 Sir John G. Lang, G.C.B.

#### FLAG APPOINTMENTS

AMERICA AND WEST INDIES.—Vice-Admiral J. W. M. Eaton, C.B., D.S.O., D.S.C., to be Commander-in-Chief, America and West Indies Station, in succession to Vice-Admiral Sir John F. Stevens, K.B.E., C.B., to take effect in late October, 1955.

D.C.N.P.—Rear-Admiral Sir Charles E. Madden, Bt., C.B., to be Deputy Chief of Naval Personnel (Manpower Planning), in succession to Rear-Admiral M. W. St. L. Searle, C.B., C.B.E., to take effect about mid-August, 1955.

F.O. (SUBMARINES).—Rear-Admiral W. J. W. Woods, D.S.O., to be Flag Officer (Submarines), in succession to Rear-Admiral G. B. H. Fawkes, C.B., C.V.O., C.B.E., to take effect in December, 1955.

INTERVIEW BOARDS.—Rear-Admiral C. T. Jellicoe, C.B., D.S.O., D.S.C., to be Flag Officer, Admiralty Interview Boards (see under "Personnel").

DEPUTY E.-IN-C.—Rear-Admiral N. E. Dalton, O.B.E., for duty with Engineer-in-Chief, Admiralty, Bath, and as Deputy Engineer-in-Chief, vice Rear-Admiral I. G. Maclean, C.B., O.B.E., with effect from 3rd October, 1955. Rear-Admiral Maclean is placed on the retired list.

Captain G. O. Naish to be Rear-Admiral with effect from 29th August, 1955, and for engineering duties on the staff of the C.-in-C., Portsmouth, vice Rear-Admiral N. E. Dalton, O.B.E., from 2nd September, 1955.

Captain J. P. W. Furse, O.B.E., to be Rear-Admiral with effect from 19th September, 1955, and to be Director of Aircraft Maintenance and Repair, vice Rear-Admiral J. D. N. Ham, C.B.

Rear-Admiral J. D. N. Ham, C.B., to be Rear-Admiral Reserve Aircraft, vice Rear-Admiral L. E. Rebbeck, C.B., with effect from 3rd October, 1955. Rear-Admiral Rebbeck is placed on the retired list.

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Mr. Norman Arthur York, M.A. (Cantab.), Senior Housemaster, Welbeck College, Worksop, Notts., has been appointed Headmaster of the Royal Hospital School, Holbrook, Suffolk, to date 1st January, 1956, in succession to Mr. J. H. Babington, G.C., O.B.E., M.A., B.Sc., who has obtained another appointment.

#### EXERCISES AND CRUISES

HOME FLEET.—About 30 ships of the Home Fleet and Training Squadron assembled at Portland and Invergordon early in September for their Autumn exercises and cruises, which continue until December. During the cruise ships will be seen at some 15 home ports. In addition, about 40 minesweepers of the Inshore Flotilla are visiting British and Continental ports. From 6th to 10th October, units of the Home Fleet visited Copenhagen during the period of the Federation of British Industries Exhibition. Admiral Sir Michael Denny, Commander-in-Chief, flew his flag in H.M.S. *Apollo*. The First Lord, Mr. J. P. L. Thomas, visited the Fleet at Invergordon from 8th to 10th September; and the Prime Minister, Sir Anthony Eden, on 19th and 20th September.

EXERCISE "SEA ENTERPRISE."—From noon on 21st to noon on 28th September, a N.A.T.O. maritime tactical exercise known as "Sea Enterprise" was held in the Norwegian sea area. It was planned without regard to any particular strategic or



geographic setting to exercise the functions of a carrier task force supported by shore-based maritime aircraft and an anti-submarine carrier group, and to provide operational training for commanders and units participating. The exercise was controlled jointly by Admiral Sir Michael Denny and Air Chief Marshal Sir John Boothman.

**MEDITERRANEAN.**—A combined exercise in which British and Yugoslav warships took part during a visit of the British Mediterranean Flotilla Command to Yugoslav waters was held in the area of Split from 15th to 30th July.

Two fast naval craft, the first of a Naval Patrol Boat Squadron to be based in Cyprus waters, arrived at Famagusta from Malta at the end of July and began patrolling with air co-operation.

**H.M.S. *Cumberland***, trials cruiser, returned to Devonport on 28th September from the Mediterranean where she had been operating since May. Devices under trial included the new rapid firing A/A gun turret, the washdown system for atomic bomb fall-out, a fibre glass 25-ft. motor boat, and survival suits intended to prevent casualties from immersion.

**EAST INDIES.**—The sixth Commonwealth joint exercise to be held at Trincomalee since the war took place from the end of July to the end of August. Over 25 ships of the Royal Navy, Royal Pakistan Navy, Royal Ceylon Navy, and Indian Navy took part, in addition to aircraft of the Far East Air Force and R.A.F. Coastal Command and the Fleet Requirements Unit of the Indian Navy.

**SOUTH ATLANTIC.**—Allied anti-submarine exercises in the Western Indian Ocean took place in July in which ships and aircraft of Great Britain and South Africa and French aircraft from Madagascar took part. Vice-Admiral Sir Ian M. R. Campbell, Commander-in-Chief, South Atlantic, presided over subsequent discussions at Salisbury Island Naval Base, Durban.

#### PERSONNEL

**INTERVIEW BOARDS.**—From 21st September, a Flag Officer (Rear-Admiral C. T. Jellicoe, C.B., D.S.O., D.S.C.) has been appointed in charge of the two Admiralty Interview Boards which interview all candidates for commissions in the Royal Navy and Royal Marines. His title is Flag Officer, Admiralty Interview Boards (F.O.A.I.B.), and his headquarters are at the R.N. Air Station, Gosport. Resulting from this appointment, the First Admiralty Interview Board, of which the Flag Officer himself continues to be President, moved from the Britannia Royal Naval College, Dartmouth, to Gosport on 21st September. This Board is responsible for interviewing:—

- (a) candidates for cadetships in the Royal Navy and first appointments in the Royal Marines.
- (b) Artificer apprentices recommended for commissions in the engineering or electrical branch.
- (c) University graduate candidates for commissions in the engineering or electrical branch.
- (d) Ratings recommended for commissions through the Upper Yardman scheme.
- (e) Candidates for naval scholarships.

The Second Admiralty Interview Board which is responsible for interviewing candidates for Short Service and National Service aircrew commissions and National Service ratings recommended for commissions in the executive or supply and secretariat branch, will move from Lee-on-Solent to Gosport in the middle of next year. Thus all Admiralty interview arrangements will be concentrated in one establishment and under the control of one senior officer.

**CHATHAM BARRACKS.**—The Royal Naval Barracks at Chatham, H.M.S. *Pembroke*, on 29th September received the freedom of the Borough of Chatham at a ceremony at Medway Barracks (the former Royal Marine Barracks), Chatham. A similar honour was accorded by the Borough of Gillingham on 28th June.

## MATERIEL

**H.M.S. VANGUARD.**—The Board of Admiralty have decided that when H.M.S. *Vanguard* completes her refit in a few months' time she will be placed in reserve. She will be maintained in a high state of readiness so that she can be put into active service with a minimum of delay should circumstances so require. The manpower thus released will be used for the commissioning of a guided weapons trial ship and for retaining in commission certain small ships of particular value to the Fleet at the present time.

**H.M.S. DOWNHAM.**—The inshore minesweeper *Downham* was launched on 1st September from the Cowes yard of Messrs. J. Samuel White and Co., Limited. The vessel is designed to operate in shallow waters, such as estuaries and rivers, and embodies novel features resulting from war lessons and subsequent development work.

**H.M.S. TENBY.**—The "Whitby" Class anti-submarine frigate *Tenby* was launched on 4th October at the Birkenhead shipyard of Cammell Laird and Co., Limited. Frigates of this class are of 370-ft. extreme length, with a beam of 41-ft. and are primarily designed for the location and detection of the most modern type of submarines.

**FAST TANKER.**—The Royal Fleet Auxiliary *Tidereach*, 26,000 tons, was accepted into service on 30th August from Messrs. Swan Hunter and Wigham Richardson, Limited, Wallsend-on-Tyne. The aim of this big new tanker and her sister ships, *Tiderace* and *Tiderange*, is the support of the Fleet and the replenishment of its supplies under way at sea. She has capacity for 15,000 tons of fuel cargo.

**SUPPLY ORGANIZATIONS.**—It was announced on 30th August that the First Sea Lord had set up a committee to review the structure of the supporting organizations of the naval service and to ensure that they are of the best design to operate the Navy of the future. The functions of the Navy had been laid down in a Defence White Paper, and the fleet is being either built or converted to meet these requirements. It is essential that the supporting organizations, both ashore and in the Admiralty, should keep pace with this 'new look' of the fleet.

## ROYAL NAVAL VOLUNTEER RESERVE

**R.R.S. *Discovery* COMMISSIONED.**—The Royal Research Ship *Discovery*, in which Captain Scott made one of his Antarctic expeditions, was commissioned as an H.M. Ship on 20th July, for use as an additional drillship for the London Division, R.N.V.R., with the *President* and *Chrysanthemum*. A combined commissioning and handing over ceremony was attended by members of the Admiralty Board and the Boy Scouts' Association, from whom the Admiralty acquired the ship. During this ceremony the flag of the Admiral Commanding Reserves, Vice-Admiral J. W. Cuthbert, C.B., C.B.E., was broken in the *Discovery*. Admiralty approval had been given for the A.C.R. to fly his flag as a symbol of his authority over the R.N.R., R.N.V.R. (both General Service and Air Divisions), R.N.V.(W).R., W.R.N.V.R., certain aspects of the Sea Cadet Corps, and the naval sections of the Combined Cadet Force.

**NEW OFFICER LIST.**—On 16th July it was announced that recruitment was about to start for a new officer list of the R.N.V.R. known as List 2A, the introduction of which was referred to by the First Lord in his Statement on the Navy Estimates. The training obligation will be for 14 days every three years. Entry is limited to officers who have held temporary Short Service or Extended Service Commissions in the Royal Navy or its Reserves. Age limits are from 35 to 40 according to branch, though officers may be entered up to 45 in special cases. Details may be obtained from the Admiral Commanding Reserves, Queen Anne's Mansions, St. James's Park, London, S.W.1.

## WOMEN'S ROYAL NAVAL SERVICE

**VISIT TO COPENHAGEN.**—At the invitation of the Director of the *Kvindelige Marinere*, the Danish equivalent of the W.R.N.S., two officers of the latter visited Copenhagen from 10th to 14th September to attend a conference arranged jointly by the women's naval

organizations of Denmark, Sweden, and Norway. The officers nominated were First Officer E. Roberts, Officer-in-Charge, W.R.N.S., R.N. Barracks, Chatham; and Second Officer E. L. Wilson, serving at the Royal Naval College, Greenwich, for duty with the W.R.N.S. Officers' Training Course.

**RESERVES FOR MEDITERRANEAN.**—Seventeen members of the Women's Royal Naval Volunteer Reserve, drawn from eight of the depots throughout England, Wales, Scotland, and Northern Ireland, left London by air on 18th September to assist in manning communications for the Navy during the N.A.T.O. exercise "Lifeline." Eleven were employed at Gibraltar and six at Malta. This was the first time since the W.R.N.V.R. was formed in 1952 that any members of the Reserve had gone abroad for their 14 days' annual training. They returned on 3rd October.

### ROYAL MARINES

**MOVE TO CYPRUS.**—Headquarters, 3 Commando Brigade, 40 and 45 Commandos, were moved by the Amphibious Warfare Squadron and ships of the Mediterranean Fleet from Malta to Cyprus during the early part of September.

**EXERCISE "STRONG ENTERPRISE."**—A force of 250 officers and men from 42 Commando, under the command of Lieutenant-Colonel P. L. Norcock, O.B.E., R.M., took part in the N.A.T.O. Exercise "Strong Enterprise," in Denmark, between 22nd and 29th September. This exercise included an amphibious landing by 42 Commando from H.M. Ships *Chevron* and *Chaplet* on the island of Zealand. On completion, the Commando spent four days at a barracks in Copenhagen as guests of the Danish Army.

**VISIT OF U.S. MARINE CORPS TEAM.**—A United States Marine Corps instructional team, under the command of Lieut.-General G. C. Thomas, U.S.M.C., gave a demonstration of American amphibious warfare technique at the School of Amphibious Warfare between 15th and 19th August. On completion, they visited Royal Marines establishments between 22nd and 24th August, where they saw demonstrations of commando training, cliff climbing, and amphibious landings.

**ANNEXATION OF ROCKALL ISLAND.**—The small party landed on Rockall by helicopter from H.M.S. *Vidal*, in September, to annex the island, included two cliff climbers from 42 Commando. It is thought that this is the first case in history that territory has been annexed in this fashion. All Royal Marines recruits receive basic instruction in cliff climbing and selected men may specialize in this technique.

### DOMINIONS AND COLONIES

#### AUSTRALIA

**FIRST JET SQUADRONS.**—The first three jet and turbo-jet squadrons for the Fleet Air Arm of the Royal Australian Navy were officially formed at the R.N. Air Station, Culdrose, Cornwall, on 23rd August. They are 808 Squadron equipped with eight Sea Venoms, and 816 and 817 Squadrons, each operating six Gannets. The squadrons will go to Australia in March, 1956, in H.M.A.S. *Melbourne*.

**RETURN OF H.M.S. VENGEANCE.**—H.M.S. *Vengeance*, light fleet carrier, which had been on loan to the Royal Australian Navy for two and a half years, returned to Portsmouth on 5th August. Her ship's company will commission H.M.A.S. *Melbourne*.

**VISIT TO LONDON.**—H.M.A.S. *Queenborough*, fast anti-submarine frigate, paid a courtesy visit to the Pool of London from 2nd to 8th August. This is believed to have been the first time that a warship of the Royal Australian Navy had ever proceeded up the Thames.

**MONTE BELLO SURVEY.**—Mr. J. Francis, the Australian Navy Minister, announced on 22nd September that two Australian warships would leave Sydney soon to survey the Monte Bello islands area, where British atomic tests are to be made next April. They are the frigate *Warrego*, equipped for hydrographic work, and the *Karang*i, boom defence ship.

**CANADA****NEW DESTROYER ESCORTS**

H.M.C.S. *St. Laurent*, the first of 14 new destroyer escorts ordered for the Canadian Navy, left the Canadian Vickers yards in August for trials in the St. Lawrence.

**INDIA****TRAINING FACILITIES**

Admiral Sir Mark Pizey, the retiring Chief of the Indian Naval Staff, stated in Delhi on 11th July that India's naval training facilities were the best in Asia. Gunnery, navigation, torpedo and anti-submarine, signals, and electrical schools had modern equipment and could train officers and men of Commonwealth and foreign navies as well as their own men. He said that the fleet was being modernized and within the next six years would receive from British yards one reconconditioned cruiser, 12 frigates for anti-submarine and anti-aircraft duties, and eight coastal minesweepers.

**SOUTH AFRICA**

**TRANSFER OF SIMONSTOWN.**—The Prime Minister on 4th July announced in the House of Commons the transfer of Simonstown naval base to South African control, and a new naval command structure for the South Atlantic. The full text of the agreements made was published as a Ministry of Defence White Paper (Cmd. 9520, price 9d.). The transfer will be completed, except for the wireless stations, not later than 31st March, 1957.

**BOUVET ISLAND.**—Plans to establish a South African weather station on Bouvet Island, in the Southern Ocean, have been dropped. A frigate of the South African Navy which went there in January brought back information which showed that it would be difficult, though not impossible, to maintain such a station on this ice-capped and inhospitable island.

**FOREIGN****ARGENTINA****MINISTER OF MARINE**

Rear-Admiral Teodoro Hartung was appointed Minister of Marine on 24th September in the new Ministry of General Eduardo Lonardi.

**ECUADOR****DESTROYERS FROM BRITAIN**

Two "Hunt" class destroyers have been acquired from the British Admiralty, the *Meynell*, renamed *Presidente Velasco Ibarra*, and the *Quantock*, renamed *Presidente Alfaro*. The former is under refit by J. Samuel White and Co., Cowes. The latter, refitted by the same firm, was formally handed over at Portsmouth on 16th August, and accepted by the Ecuadorian Ambassador.

**EGYPT****DESTROYERS FROM BRITAIN**

It was announced in the House of Commons on 25th July that the British Government agreed on 21st May to sell two "Z" class destroyers to Egypt. The Egyptian Government had since paid for the vessels and were making the necessary arrangements for a refit in this Country.

**FINLAND****NAVAL BASE RETURNED**

The return to Finland of the naval base at Porkkala, held by Russia since 1947, was announced by Marshal Bulganin in Moscow on 17th September. According to an agreement signed two days later, Russia will vacate the base within three months. The friendship and assistance pact which was signed in 1948 for ten years will be extended to 20 years.



## ITALY

## CHIEF OF NAVAL STAFF

The appointment was announced on 3rd August of Vice-Admiral Corso Pecori Giraldi as Chief of the Italian Naval Staff in succession to Admiral Emilio Ferreri, who had recently been appointed Head of the Western European Union Armaments Control Agency. Admiral Giraldi, who is 56, commanded the battleship *Vittorio Veneto* during the 1939-45 War, was Deputy Chief of Naval Staff from 1947 to 1950, and since 1951 had been Commander-in-Chief, Adriatic Command.

## POLAND

## VISIT TO PORTSMOUTH

The Polish destroyers *Burza* and *Blyskawica* visited Portsmouth from 8th to 11th September under the command of Captain Ludwik Janczyszyn. On 9th September Captain Janczyszyn called on the Board of Admiralty and presented a gift from the Polish Navy to the Royal Navy, a skilfully fashioned model in amber of a fully-rigged three-masted sailing ship, mounted on a mosaic amber base with a silver plate inscribed in Polish, "From the Command of the Navy of the Polish Peoples' Republic, 1955."

## SPAIN

## UNITED STATES ASSISTANCE

The American Embassy in Madrid announced on 21st July that the United States has granted an additional 5,000,000 dollars (£1,785,000) to Spain for the modernization of her Navy. This brings to 30m. dollars the sum allotted to Spain for the installation of radar, fire-control equipment, and armament in Spanish naval ships under the Defence Assistance Programme.

The contract was awarded in September for the construction of a new naval base at Rota, near Cadiz, to the Construcciones Civiles-Corbetta, a joint Spanish-American group, for 17,370,000 dollars. The work will be completed within three years.

## UNITED STATES

C.N.O.—Admiral Robert B. Carney was succeeded in command of the United States Fleet and as Chief of Naval Operations by Admiral Arleigh Burke on 17th August.

ATOMIC SUBMARINES.—The second atomic submarine for the United States Navy was launched on 21st July at Groton, Connecticut, and named *Seawolf*. The keel of a third was laid in the same yard on this day.

PROGRAMME.—Mr. Charles S. Thomas, Secretary of the Navy, announced on 24th August that orders had been placed for four new nuclear-powered submarines under the 1955-56 programme. In all, 33 ships are to be built for the U.S. Navy during this financial year, including the fifth aircraft carrier of the "Forrestal" class, a 60,000-ton ship to be named the *Kittyhawk*.

HEALTH OF SENIOR OFFICERS.—*The Times* Washington Correspondent reported on 28th September the issue of an order by Admiral Burke, C.N.O., stating that adequate leisure and relaxation are vital to a high degree of mental acuity and physical vigour among senior officers. Commanders, it is announced, are ordered to enforce periods of time off 'for the good of the service.' No man, said Admiral Burke, was so indispensable that he could not take 30 days' leave a year.

## ARMY NOTES

### GREAT BRITAIN

#### H.M. THE QUEEN

The Queen and the Duke of Edinburgh visited the Green Jackets Depot on 25th July and subsequently were present at the Bicentenary Parade of The King's Royal Rifle Corps at St. Cross when The Queen took the salute at a march past.

Queen Elizabeth The Queen Mother visited York on 1st August and was present at the Bicentenary Celebrations of The King's Own Yorkshire Light Infantry, of which Her Majesty is Colonel-in-Chief.

Queen Elizabeth The Queen Mother visited the Depot of The Black Watch (Royal Highland Regiment), of which Her Majesty is Colonel-in-Chief, at Perth on 24th August, when she unveiled a Memorial Window in memory of the officers and other ranks of the 6th Battalion who gave their lives in the 1939-45 War.

The Duke of Edinburgh visited the Royal Military Academy, Sandhurst, on 28th July and took the Salute at The Sovereign's Parade.

The Duke of Gloucester, Colonel-in-Chief of The Gordon Highlanders, presented Colours, on behalf of The Queen, to the 4/7th Battalion at Aberdeen on 20th August.

The Princess Royal, Controller Commandant of the Women's Royal Army Corps, took the Salute at the Passing Out Parade of Officer Cadets at the W.R.A.C. School of Instruction, Huron Camp, Hindhead, on 27th July.

The Princess Royal, as Colonel-in-Chief, The Royal Scots, presented new Colours to the 7/9th (Highlanders) Battalion of the Regiment in the grounds of the Palace of Holyroodhouse on 20th August.

The Duchess of Gloucester, Colonel-in-Chief of The King's Own Scottish Borderers, presented, on behalf of The Queen, new Colours to the 5th Battalion at Dumfries on 24th July. On 1st August she inspected the 1st Battalion of the Regiment at Ballykinlar, Northern Ireland.

His Royal Highness Prince Edward George Nicholas Paul Patrick, Duke of Kent, was gazetted 2nd Lieutenant, Royal Scots Greys, with seniority 29th July, 1955.

The Queen has been graciously pleased to approve the following appointments :—

**TO BE AIDES-DE-CAMP TO HER MAJESTY.**—Brigadier A. M. Finlaison, D.S.O., O.B.E., late Infantry (6th August, 1955), vice Brigadier R. G. C. Poole, C.B.E., retired; Brigadier J. H. Gregson, late R.A. (15th August, 1955).

**TO BE HONORARY PHYSICIAN TO HER MAJESTY.**—Colonel R. A. Bennett, M.D., F.R.C.P.(Edin.), late R.A.M.C. (17th October, 1955), vice Major-General W. R. D. Hamilton, C.B., O.B.E., M.D., retired.

**TO BE HONORARY DENTAL SURGEONS TO HER MAJESTY.**—Colonel H. Quinlan, B.D.S., late R.A.D.C. (9th July, 1955), vice Colonel J. B. Cowie, O.B.E., M.M., F.D.S., retired; Lieut.-Colonel (now Colonel) E. C. Browne, O.B.E., B.D.S., late R.A.D.C. (9th August, 1955), vice Colonel A. Brazenor, F.D.S., retired.

**TO BE COLONEL COMMANDANT.**—Of the Corps of Royal Engineers, Colonel (Honorary Major-General) Sir John D. Inglis, K.B.E., C.B., M.C. (11th July, 1955), vice Major-General (Honorary Lieut.-General) Sir Arthur E. Grasset, K.B.E., C.B., D.S.O., M.C., tenure expired.

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#### APPOINTMENTS

**WAR OFFICE.**—Major-General O. P. J. Rooney, C.B.E., R.A.P.C., appointed Paymaster-in-Chief, The War Office, and Inspector of Pay Services (23rd September, 1955).

General Sir Gerald W. R. Templer, G.C.B., G.C.M.G., K.B.E., D.S.O., appointed Chief of the Imperial General Staff (29th September, 1955).

UNITED KINGDOM.—Lieut.-General B. C. H. Kimmins, C.B., C.B.E., appointed G.O.C., Northern Ireland District (18th July, 1955).

Brigadier R. W. Jelf, C.B.E., A.D.C., appointed Chief of Staff, Headquarters Eastern Command, with the temporary rank of Major-General (January, 1956).

Brigadier R. W. Urquhart, D.S.O., appointed Chief of Staff, Headquarters Western Command, with the temporary rank of Major-General (January, 1956).

Brigadier G. P. Gregson, C.B.E., D.S.O., M.C., appointed General Officer Commanding, 1st Infantry Division, with the temporary rank of Major-General (January, 1956).

Colonel (temporary Brigadier) R. H. Hewetson, C.B.E., D.S.O., appointed General Officer Commanding, 16th Airborne Division, T.A., with the temporary rank of Major-General (January, 1956).

GERMANY.—Brigadier (temporary Major-General) R. St. G. T. Ransome, C.B., C.B.E., M.C., appointed Chief, Joint Services Liaison Staff, Joint Services Liaison Organization, British Army of the Rhine, retaining the temporary rank of Major-General (5th May, 1955).

FAR EAST LAND FORCES.—Colonel (temporary Brigadier) L. H. O. Pugh, C.B.E., D.S.O., appointed Chief of Staff, Far East Land Forces, with the temporary rank of Major-General (January, 1956).

#### PROMOTIONS

*General.*—Lieut.-General to be General :—Sir Lashmer G. Whistler, K.C.B., K.B.E., D.S.O. (6th July, 1955).

*Lieut.-Generals.*—Temporary Lieut.-Generals or Major-Generals to be Lieut.-Generals :—B. C. H. Kimmins, C.B., C.B.E. (6th July, 1955); G. W. Lathbury, C.B., D.S.O., M.B.E. (7th July, 1955); W. P. Oliver, C.B., O.B.E. (15th August, 1955).

*Major-Generals.*—Brigadiers (temporary Major-Generals) to be Major-Generals :—A. E. Morrison, O.B.E. (30th June, 1955); T. P. D. Scott, C.B.E., D.S.O. (2nd July, 1955); R. St. G. T. Ransome, C.B., C.B.E., M.C. (6th July, 1955); E. C. Colville, D.S.O. (7th July, 1955); W. G. H. Pike, C.B.E., D.S.O. (7th August, 1955); G. A. Bond, C.B.E., A.M.I.Mech.E. (15th August, 1955); W. G. Roe, C.B.E., A.D.C., A.M.I.Mech.E. (12th September, 1955).

#### RETIREMENTS

The following General Officers have retired :—Major-General L. E. C. M. Perowne, C.B., C.B.E., A.M.I.E.E. (7th August, 1955); Lieut.-General Sir John D. Woodall, K.B.E., C.B., M.C. (15th August, 1955); Major-General R. B. B. Cooke, C.B., C.B.E., D.S.O. (12th September, 1955).

#### C.I.G.S.'s CONFERENCE

The Chief of the Imperial General Staff, Field-Marshal Sir John Harding, held his last annual conference at Camberley from 17th to 19th August. The main subject for study were problems of organization which might arise when Commonwealth forces are operating together.

#### TRIAL CHANGES IN ARMY STRUCTURE

A series of exercises, known as "Commonwealth Four," carried out in the British Army of the Rhine, were designed to work out new types of divisions adapted to the needs of nuclear war and to discover whether the supply system of the British Army can be changed in order to conform with that of other N.A.T.O. countries. At the conclusion of "Commonwealth Four," a full-scale exercise, known as "Full House," was carried out to test the new divisions in realistic conditions. The exercise made considerable use of atomic artillery. Among the principal visitors to the exercise were Field-Marshal Sir John Harding, Chief of the Imperial General Staff, General Sir Gerald Templer, C.I.G.S.

designate, Mr. Fitzroy Maclean, Under-Secretary of State for War, General Gruenther, Supreme Allied Commander in Europe, Lord Ismay, Secretary-General of the N.A.T.O. Council, Marshal Juin, Commander Allied Forces Central Europe, and Herr Blank, Defence Minister of Western Germany.

#### TERRITORIAL ARMY TRAINING

Exercise "Ethan Down," in which the 43rd (Wessex) Infantry Division, T.A., took part, was carried out on Salisbury Plain during September. The object was to practise, under conditions of supposed nuclear warfare, the occupation of a defensive position and withdrawal to another. On the conclusion of the exercise Lieut.-General Sir Ernest Down, G.O.C.-in-C., Southern Command, who directed it, stated that the exercise was extremely well carried out and that in his opinion the British Territorial Army was better than any other reserve army in the world.

#### WITHDRAWAL FROM AUSTRIA

The last British troops in Austria, the 1st Battalion, The Middlesex Regiment, returned to Great Britain in September after carrying out occupation duties since March, 1953. The withdrawal was in accordance with the terms of the recent peace treaty which came into force on 27th July.

#### REGULAR ARMY RECRUITING

The Regular Army recruiting statistics for September show that the total number of enlistments from civil life during the month were 2,715 men and 635 boys compared with 2,254 and 101 in July and 2,444 and 59 in August. The figures for re-enlistments were 1 from Short Service (July, 4; August, nil) and 342 from National Service (July, 304; August, 418).

### DOMINIONS AND COLONIES

#### CANADA

**APPOINTMENTS.**—Lieut.-General H. D. Graham, C.B.E., D.S.O., E.D., C.D., has been appointed to be Chief of the Canadian General Staff in succession to Lieut.-General G. G. Simonds, C.B., C.B.E., D.S.O., C.D., to date 1st September.

Brigadier A. E. Winch, C.B.E., C.D., has been appointed to command the 1st Canadian Infantry Division.

Brigadier M. S. Dunn, O.B.E., E.D., has been appointed Military Adviser to the Canadian Commissioner in Viet Nam.

Colonel H. E. T. Doucet, O.B.E., E.D., has been appointed Military Adviser to the Canadian Commissioner in Cambodia, with the acting rank of Brigadier.

Colonel F. Le P. T. Clifford, O.B.E., C.D., has been appointed Military Adviser to the Canadian Commissioner in Laos, with the acting rank of Brigadier.

Colonel J. Wallis, O.B.E., has been appointed Chief of Staff, Headquarters Eastern Command (mid-August).

Major-General S. F. Clark, C.B.E., C.D., has been appointed General Officer Commanding Central Command.

Lieut.-Colonel J. M. Delamere, M.B.E., E.D., C.D., has been appointed Deputy Director of Military Training.

Acting Major-General T. E. D'O Snow, O.B.E., C.D., has been appointed Commander, Eastern Ontario Area.

**SUMMER MANŒUVRES.**—The biggest peace-time manœuvres ever held in Canada reached their climax with Exercise "Rising Star," in which more than 12,000 troops took part. The main object was to test 1st Canadian Division in an operational role.



The exercise was directed by Major-General Plow, General Officer Commanding Eastern Command.

**MILITARY EQUIPMENT SENT TO EUROPE.**—Several shipments have been sent to N.A.T.O. countries in Europe between July and September, 1955, the equipment including trucks, rocket launchers, field artillery tractors, radar equipment, and various types of ammunition.

### AUSTRALIA

**VISIT OF CHIEF OF STAFF.**—Lieut.-General H. Wells, C.B.E., D.S.O., Chief of the Australian General Staff, visited Canada and the United States during September for discussions with army authorities.

**AUSTRALIAN TROOPS FOR MALAYA.**—The advance party of the 2nd Battalion, Royal Australian Rifles, arrived in Malaya on 12th September. The main body was expected to follow during October. On arrival they will join the 28th Commonwealth Infantry Brigade Group.

### NEPAL

#### THE KING OF NEPAL APPOINTED HONORARY GENERAL

Her Majesty The Queen has been graciously pleased to appoint His Majesty Mahendra Bir Bikram Shah, Maharajadhiraja of Nepal, to be Honorary General, with effect from 23rd September, 1955.

### FOREIGN

#### FRANCE

##### NEW CHIEF OF ARMY STAFF

On 15th June, the French Cabinet decided to appoint General André-Marie Zeller as Chief of Staff of the Army in succession to General Blanc.

### GERMANY

#### VISIT OF GENERAL SPEIDEL TO U.S.

General Hans Speidel left Bonn in September for a visit of several weeks to the United States, representing the Ministry of Defence of Western Germany. He is expected to take part in the meeting of the Military Representatives Committee of N.A.T.O., the first time that such a meeting has been attended by a German representative.

### RUSSIA

#### VISIT OF MILITARY ATTACHES

Three Russian military attachés, belonging to the Soviet Embassy in Washington, were invited to visit the infantry centre at Fort Benning in September. It was stated that the visit was in return for a similar invitation extended to American military attachés in Moscow.

### UNITED STATES

#### NEW U.S. COMMANDANT IN BERLIN

It was announced on 31st August that Brigadier-General Hugh P. Harris had been appointed U.S. Commandant in Berlin, vice Brigadier-General F. T. Pachler, who had been assigned to Supreme Allied Headquarters in Paris.

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## AIR NOTES

### GREAT BRITAIN

#### H.M. THE QUEEN

PRINCESS MARGARET VISITS FARNBOROUGH.—Princess Margaret flew to Farnborough, Hampshire, in a Westland S-55 helicopter of the Royal Navy on 7th July when the Royal Aircraft Establishment celebrated its jubilee. During the afternoon she watched a flying display by aircraft, the production of which spans most of the R.A.E.s 50 years.

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#### APPOINTMENTS

AIR MINISTRY.—Air Vice-Marshal R. B. Lees, C.B., C.B.E., D.F.C., appointed Assistant Chief of the Air Staff (Operations) (August, 1955).

Air Vice-Marshal G. D. Harvey, C.B., C.B.E., D.F.C., appointed Assistant Chief of the Air Staff (Training) (towards the end of 1955).

Air Vice-Marshal D. Jackman, C.B., C.B.E., appointed Director-General of Equipment (25th August, 1955).

Air Commodore M. L. Heath, O.B.E., appointed Director-General of Personnel (II) with the acting rank of Air Vice-Marshal (15th August, 1955).

Group Captain A. C. Kermode, O.B.E., M.A., F.R.Ae.S., A.D.C., appointed Director of Educational Services with the acting rank of Air Vice-Marshal (November, 1955).

BOMBER COMMAND.—Air Marshal Sir Harry Broadhurst, K.C.B., K.B.E., D.S.O., D.F.C., A.F.C., appointed Air Officer Commanding-in-Chief (January, 1956).

FLYING TRAINING COMMAND.—Air Vice-Marshal R. L. R. Atcherley, C.B., C.B.E., A.F.C., appointed Air Officer Commanding-in-Chief, with the acting rank of Air Marshal (December, 1955).

Air Vice-Marshal J. Cox, O.B.E., D.F.C., appointed Senior Air Staff Officer (September, 1955).

MAINTENANCE COMMAND.—Air Vice-Marshal R. B. Jordan appointed Air Officer Commanding-in-Chief with the acting rank of Air Marshal (January, 1956).

Air Commodore G. L. Worthington, C.B.E., appointed Air Officer Commanding No. 40 Group (17th August, 1955).

SCHOOL OF LAND-AIR WARFARE.—Air Vice-Marshal J. H. Edwardes-Jones, C.B., C.B.E., D.F.C., A.F.C., appointed Commandant, School of Land-Air Warfare (August, 1955).

ALLIED AIR FORCES, CENTRAL EUROPE.—Air Marshal Sir George H. Mills, K.C.B., D.F.C., appointed Commander, Allied Air Forces, Central Europe (January, 1956).

SECOND TACTICAL AIR FORCE.—Air Vice-Marshal the Earl of Bandon, C.B., C.V.O., D.S.O., appointed Commander-in-Chief with the acting rank of Air Marshal (December, 1955).

Air Commodore H. A. Hogan, C.B., D.F.C., appointed Air Officer Commanding No. 83 Group with the acting rank of Air Vice-Marshal (September, 1955).

BRITISH FORCES, ADEN.—Air Vice-Marshal L. F. Sinclair, G.C., C.B., C.B.E., D.S.O., appointed Air Officer Commanding (September, 1955).

FAR EAST.—Air Commodore E. C. Bates, C.B.E., A.F.C., appointed Air Officer in Charge of Administration with the acting rank of Air Vice-Marshal (October, 1955).

MALTA.—Air Vice-Marshal G. E. Nicholetts, C.B., A.F.C., appointed Air Officer Commanding with the acting rank of Air Marshal (January, 1956).

BRITISH JOINT SERVICES MISSION, U.S.A.—Air Vice-Marshal A. D. Selway, C.B., D.F.C., appointed Commander, Royal Air Force Staff (November, 1955).

## RETIREMENT

MEDICAL BRANCH.—Air Vice-Marshal V. S. Ewing, C.B., C.B.E., M.B., Ch.B., D.P.H., placed on the retired list (29th July, 1955).

## EXERCISE

The major air defence exercise of the year, known as Exercise "Beware," took place between 23rd September and 2nd October in three phases. Its object was to exercise the air defence system, under the command of the Air Officer Commanding-in-Chief, R.A.F. Fighter Command, against all forms of air attack.

At the conclusion of the exercise, Air Marshal Sir Dermot Boyle, A.O.C.-in-C., Fighter Command, said that a greater rate of interception of 'enemy' aircraft was made at greater heights and farther from the coast of Britain than in any previous exercise. The main reasons for this were: (i) improvements in the performance of new radar equipment; (ii) superior performance of the Hunter jet fighters, which were taking part in any exercise for the first time, compared with the older types of fighters; and (iii) assistance given by the early warning system on the Continent.

He also made the following points. He believed that the force put against the air defence during the exercise was tougher than anything which could at present be brought against Britain. The attackers were greater quantitatively and qualitatively than any possible enemy. He had been satisfied with the two Javelins which took part in the exercise and the serviceability of the Hunters had been extremely good.

## MATERIEL

CANBERRA MARK 9.—A new photographic reconnaissance version of the English Electric Canberra twin-jet bomber, which has been designed to operate over very long distances at altitudes beyond the ceiling of present-day fighters, was disclosed on 15th July. Known as the Canberra Mark 9, it has been ordered in quantity for the R.A.F. An earlier version of the Canberra, powered by two Bristol Olympus engines, holds the world altitude record for powered aircraft at 63,668 feet.

HELICOPTER DESIGNED FOR THE ARMY.—Expected to fly in the near future, Fairey's ultra-light helicopter designed to meet Army A.O.P. and liaison requirements is the first British helicopter designed from the outset for gas-turbine power. Its engine is a Blackburn Turbomeca Palouste 500, mounted in the fuselage behind the crew of two and providing compressed air to tip burners.

HUNTER SETS UNOFFICIAL RECORD.—By flying a Hawker Hunter from Turnhouse, Edinburgh, to Farnborough, Hants., in 29 min. 33.4 sec., Squadron Leader R. L. Topp, Officer Commanding No. 111 Squadron based at North Weald, created an unofficial record on 5th August. His average speed was about 680 m.p.h.

AN UNUSUAL AIRCRAFT.—The Ministry of Supply has placed a small contract with the M.L. Aviation Company, Ltd., of White Waltham, Berkshire, for the construction of a small communication aircraft, described by the makers as an "unusual design." Such an aircraft would have both military and civil applications, particularly in areas where road communications were poor. A spokesman of the company said that the aircraft had a wooden body and the wing, which was inflated before flight, was detachable for storage purposes. The machine, a two-seater, was powered by a 65 h.p. engine. It had a range of about 100 miles and a maximum speed of about 45 m.p.h.

HARVARDS REPLACED.—One of the best-known trainers ever used by the Royal Air Force, the North American Harvard, has now officially 'retired' from service in the R.A.F. Flying Training schools. The last Harvard course passed out at Feltwell at the end of March. Subsequent trainees will have basic instruction on Provosts and advanced training on Vampire T Mk. IIs.

## MISCELLANEOUS

**C.A.S. VISITS UNITED STATES AND CANADA.**—Marshal of the Royal Air Force Sir William Dickson spent a week in the United States and in Canada in September and had discussions on matters of common interest with the Chief of Staff of the U.S.A.F. and the C.A.S. of the R.C.A.F.

**R.A.F. PARTY TO ACCOMPANY COMMONWEALTH TRANS-ANTARCTIC EXPEDITION.**—Four Royal Air Force pilots with two aircraft, accompanied by ground servicing airmen, will be seconded to the Commonwealth Trans-Antarctic Expedition, which leaves for Antarctica this Winter. During their stay in the South Polar regions, the R.A.F. party will help the expedition by carrying out reconnaissance and other duties. The leader of the expedition is Dr. V. E. Fuchs, the well-known Arctic and Antarctic explorer.

**R.A.F. TESTING NEW SURVIVAL RATION.**—A new R.A.F. emergency ration, designed for use by aircrew survivors under both very cold and very hot conditions, is now undergoing prolonged winterization trials and storage trials under tropical conditions.

**BATTLE OF BRITAIN CELEBRATIONS.**—The fly-past over London took place on 15th September. One Hurricane, one Spitfire, 48 Hunters of Fighter Command, 12 Seahawks of the Fleet Air Arm, and 12 Sabres took part. On 17th September, 46 Royal Air Force stations in the United Kingdom were at home to the public. On Sunday, 18th September, a service of thanksgiving was held in Westminster Abbey. The address was given by Dr. Harland, the Bishop of Lincoln, who was a Royal Flying Corps pilot in the 1914-18 War.

**GORDON SHEPHARD MEMORIAL PRIZE ESSAY COMPETITION.**—The prize winners of the 1955 Gordon Shephard Memorial Prize Essay Competition were :—

1st Prize (50 guineas)—Wing Commander W. Carter, D.F.C.

2nd Prize (30 guineas)—Flight Lieutenant G. H. Burgess.

3rd Prize (20 guineas)—Wing Commander H. C. D. Blasbery.

4th Prize (10 guineas)—Flight Lieutenant J. H. Dyer.

The subject for the 1956 Gordon Shephard Memorial Prize Essay Competition is as follows :—

"The change in firepower resulting from the emergence of the thermo-nuclear bomb in 1954 has had an effect on warfare which is radical, not merely one of degree. Without the benefit of past experience to guide us, the best composition of our armed forces depends on an accurate forecast of the length and form of a future war. State what you consider the most likely length and form of a major war within the next ten years, and the best composition and disposition of our forces to meet it."

## DOMINIONS AND COLONIES

## SOUTH AFRICA

## SOUTH AFRICA ORDERS SABRE 6S

Canadair recently announced the sale to the South African Government of sufficient Sabre 6 aircraft, plus spares, to equip two squadrons of the South African Air Force. The exact number of aircraft was not disclosed, though probably about 40 machines are involved. Though deliveries could start immediately, South Africa has asked for them to be delayed until nine months hence, with completion of the order in the following three months. Training of key S.A.A.F. personnel, both air and ground crews, will be done at Canadair. The fighters will probably be ferried from Montreal via the United Kingdom, Europe, and North Africa.

## INDIA

**MISSION TO MOSCOW.**—Air Marshal Mukerjee, Chief of the Air Staff of the Indian Air Force, together with nine senior officers of the I.A.F., visited Moscow at the invitation of the Soviet Government to witness the Soviet air display held on 3rd July. The mission flew to Moscow in a Fairchild Packet (C.119) aircraft of the I.A.F. Transport Command and was in Russia for two weeks.



**I.A.F. DAKOTAS COLLIDE.**—One of the worst flying accidents in the history of the Indian Air Force occurred at Agra on 25th June when two Dakota aircraft collided near the airfield. Nineteen occupants of the two aircraft were killed.

## FOREIGN

### EGYPT

#### STRENGTHENING THE EGYPTIAN AIR FORCE

The Egyptian Government is planning a considerable strengthening of the Egyptian Air Force, with the aim of making it the strongest air arm in the Middle East. The Air Force expansion programme is to be linked with an increase in the size of the national aircraft industry, and plans call for the build-up of a strong jet fighter force. The prototype of a 'nationally-designed' jet fighter is currently under construction. If flight trials are successful, this jet fighter will supplement and eventually replace the Meteor F.4's and Vampire FB.52's now serving with Egyptian fighter squadrons.

### FRANCE

**AIR FORCE BUDGET.**—Air funds for the two years 1955 and 1956 are set respectively at £256,500,000 and £289,100,000. Expansion plans for the Air Force envisage a total of 54 squadrons and 146,000 personnel by 1956 and orders for 2,000 aircraft during the period 1955-58. Radar defence cover for the west and south-west of the country will not be completed until after 1961.

**NEW CHIEF OF THE AIR STAFF.**—General de Corps Aerien Paul Bailly was appointed Chief of the Air Staff in succession to General d'Armée Aerienne Fay, who retired on 22nd March, 1955. General Bailly was promoted to the rank of General d'Armée Aerienne on 1st June, 1955.

**MYSTÈRE FIGHTERS IN SERVICE.**—Mystère IVA jet fighters are now in service with the French Air Force and pilots have been engaged in conversion training at Mont-de-Marsan.

**RE-EQUIPMENT WITH F.84F THUNDERSTREAKS.**—In common with several other N.A.T.O. countries, France is starting to re-equip her fighter-bomber squadrons with the swept-wing Thunderstreak, and the first batch of 37 arrived at Marseilles in June. The aircraft went to the airfield at Marignane where they were to be assembled and tested prior to being handed over to the F.A.F. as replacements for the straight-winged F-84G Thunderjet aircraft now in service.

**NEW AIRCRAFT.**—Production of the pre-series order of six Vautour aircraft is well in hand and the third model is already flying. The pre-series order will comprise two of each type of Vautour (all-weather fighter, ground support, and light bomber) and will be followed by the production of 140 series aircraft of all models. In the field of the light-weight fighter, France is engaged in building three prototypes of both the Breguet B.1001 Taon and the Mystère XXVI. Both aircraft are to be equipped with the Bristol Orpheus engine and the prototype programme is being subsidized by the U.S.A.

The Super-Mystère IVB-2 is the designation given to the planned production version of the Super-Mystère IVB-1, which first flew in March this year. The former aircraft was powered by a Rolls-Royce Avon, but the production version is to use a French Atar engine. The Marcel Dassault M.D.550 delta-winged fighter is at present undergoing flight testing. It is powered by two Armstrong Siddeley Viper engines (built in France under licence) and the first flew at the end of June. The S.O.9050 Trident II, a development of the S.O.9000 Trident I, first flew on 17th July, 1955. The Mark II is officially described as the military version of the Mark I equipped to intercept high-speed, high-altitude bombers. The Trident mounts three rocket motors in the tail and two small turbojet engines at the wing tips. It aroused considerable interest in June when it exceeded Mach 1 in a climb.

**FRENCH DELTA INTERCEPTOR.**—The delta-wing Marcel Dassault interceptor (two Dassault/Armstrong Siddeley Vipers), which was first flown on 25th June, has made several test flights with Roland Glavany at the controls.

### WESTERN GERMANY

**AIR PLANNERS VISIT U.S.A.** A party of four ex-Luftwaffe officers from the Air Section of the Ministry of Defence visited the U.S.A. during July and inspected technical centres and training schools of the U.S.A.F.

**DORNIER DO.27.**—The Dornier Do.27 single-engined two-seater light aircraft has been air tested at Dornier's airfield near Munich. It is understood that the aircraft is a development of the Do.25, which was built in Spain and first flew in June, 1954.

### ITALY

**DEFENCE BUDGET.**—The Italian Defence Budget for the 1955-56 financial year, which was approved by the Italian Chamber of Deputies on 28th July, included air estimates amounting to approximately £67,000,000, plus £230,000 for aircraft construction. Included in the overall figure is some £8,500,000 for infrastructure. The Budget report quoted the present strength of the I.A.F. as follows:—three fighter air brigades equipped with Thunderjet F-84G's; one interceptor and all-weather fighter air brigade, and one stormo of the same type; one reconnaissance gruppo, to be expanded to an air brigade; two anti-submarine gruppi; and 15 rescue aircraft and 100 non-operational aircraft of various types. The number of aircraft available for operational use, says the report, had increased by 20 per cent. over the previous year. This result was good in itself but still insufficient, in particular for the interceptor and all-weather fighters. The report still placed faith in the usefulness of anti-aircraft artillery and called for the establishment of a Civil Defence organization.

**PRODUCTION OF SABRE F-86K AIRCRAFT BY FIATS.**—The first deliveries of Sabre F-86K aircraft assembled by Fiats under contract to America were made when eight aircraft were handed over for subsequent delivery to the I.A.F. recently. It has been reported that by the end of this year 40 of these aircraft will have been delivered by Fiat. In 1956, deliveries will proceed at the rate of seven aircraft per month and the present contracts completed by early 1957. Contracts at present call for delivery of 126 aircraft.

**SALE OF FIAT G-82 JET TRAINERS TO THE ARGENTINE.**—Press reports state that the Argentine Government has ordered 30 Fiat G-82 jet trainers.

### THE NETHERLANDS

**PROMOTION.**—H.M. The Queen has been graciously pleased to approve of the promotion of Air Commodore (honorary) His Royal Highness Prince Bernhard of the Netherlands, G.C.V.O., G.B.E., to the honorary rank of Air Vice-Marshal, Royal Air Force Volunteer Reserve, with effect from 8th July, 1955.

**RE-EQUIPMENT OF THE R. NETHERLANDS A.F.**—The Royal Netherlands Air Force is to form three all-weather fighter squadrons with F-86K Sabre aircraft to be obtained from the U.S.A. Re-equipment with the F-84F Thunderstreak is also scheduled to start soon.

### SWEDEN

#### FIRST HUNTER EXPORTED

The first Hawker Hunter swept-wing fighter to be exported has been flown to Sweden from the Hawker Aircraft airfield at Dunsfold, Surrey, by a major of the Royal Swedish Air Force. Sweden has ordered £12,000,000 worth of Hunters. The Hunters for Scandinavia are being manufactured in the United Kingdom.

### THAILAND

#### FIRST JET AIRCRAFT IN THE R.T.A.F.

Six Lockheed T.33 jet training aircraft were handed over to the Royal Thai Air Force at the end of July, 1955, by the United States. These, Thailand's first jet aircraft, were provided under the Mutual Defence Assistance Programme. The aircraft were flown from Japan to Bangkok, via Clark Field, Philippines, by U.S.A.F. pilots and high-ranking Royal Thai Air Force pilots.

## VENEZUELA

## VENOMS IN VENEZUELA

The Venezuelan Air Force, having operated Vampires for many years, is now re-equipping with a quantity of Venom F.B.4s. This mark of Venom has powered ailerons, and must be considerably more expensive than the F.B.1; yet the improved performance is obviously well worth the extra cost. Apart from the sale of J.34 Hunters to Sweden, this is the first type of powered-control military aircraft to be exported from Britain.

## UNITED STATES

**U.S.A.F. AWARD CONTRACTS.**—The Air Force's announcement that it is letting Phase 1 development contracts to six airframe companies for three new aircraft types provides a preview of what 1960's military aircraft will be like. Although the Air Force gave no details about its requirements for a long-range interceptor, a fighter-bomber, and a tactical bomber, it seems evident that: (i) the interceptor will have to fly distances of 800 miles and more and return at Mach 2 or greater speeds. McDonnell's forthcoming F-101B probably approaches that range and speed and any successor will inevitably have to better that performance. (ii) The fighter-bomber will also be in the Mach 2 class because two fighter-bombers already ordered, the J57-powered North American F-100C and F-100D and the J75-powered Republic F-105 are both capable of better than Mach 1. (iii) The tactical bomber will be a supersonic aircraft. Aircraft at present in service in this category, the Douglas B-66 and Martin B-57, are capable of high subsonic and transonic speeds.

**HERR OBERTH TO WORK FOR U.S.**—The doyen of the pre-war German Interplanetary Society, Herman Oberth, now aged 66, is to work under Wernher von Braun in the U.S. Army's Redstone Arsenal on guided missile development. About 100 other rocket technicians are employed at Redstone, and most of them have become U.S. citizens within the last year.

**'SAGE' FOR U.S.A.F.**—The United States Air Force is developing a semi-automatic electronic defence system. It is hoped that this will ensure the destruction of 90 per cent. of enemy raiders. The system is known as 'Sage.' It stands for 'semi-automatic ground environment.' 'Sage' carries radar a step further by a remarkable electronic computer. It is claimed that the computer collects and evaluates at high speed information from distant radar sites and then tells commanders what weapons are available for use against enemy planes. It directs those weapons to the target.

**FIRST FLIGHT OF BELL XV-3 CONVERTIBLE AIRCRAFT.**—The Bell XV-3 convertible aircraft made its first flight on 24th August. The aircraft rose vertically and manoeuvred in all directions like a helicopter, but no transition into forward flight was attempted.

**B-52 IN SERVICE.**—The eight-jet Boeing B-52B Stratofortress is now in service with the 93rd Bomb Wing (Heavy) of the U.S. Air Force at Merced, California, having made its first flight on 15th April, 1952. Its crew of three wear partial pressure suits and helmets, and it has already taken part in flight refuelling exercises with the piston-engined Boeing KC-97 Stratotanker. Service B-52Bs have the G.E. four 20 mm. cannon tail turret, with a new radar automatic tracking and firing system housed in a larger radome.

**FIRST FLIGHT OF XF-84H.**—The Republic XF-84H experimental turboprop fighter, powered with an Allison XT-40, made its first flight at the U.S.A.F. Flight Test Centre, Edwards Air Force Base, California, on 27th July. The machine has been built to test the feasibility of supersonic propellers of turboprop type fighters for operational service with America's armed forces.

**FIRST SUPERSONIC SPEED RECORD CLAIMED.**—The Los Angeles *Times* reported that an Air Force pilot on 20th August established the official world supersonic speed record by flying a North American Super Sabre between 800 and 900 m.p.h.

## REVIEWS OF BOOKS

### GENERAL

**Greek Entanglement.** By Brigadier E. C. W. Myers, C.B.E., D.S.O. (Rupert Hart-Davis.) 18s.

In his history of the 1939-45 War, Sir Winston Churchill has given us the high-level aspects of the origin and development of "this Greek entanglement" and now, for the first time, Brigadier Myers, as the head of the British Military Mission to Greece, 1942-1943, gives us the views of the man on the spot. He writes well and, telling his story in narrative form, makes no attempt to sum up on the many controversies in which he became involved. In the final frustration that fell to his lot, he enlists our sympathy.

Many have tried to assess the results achieved by the various Resistance movements engineered and supported by the Allies during the war, and the strategic or tactical results have been weighed against the political consequences and the often heavy reprisals which resulted in the country concerned. Greece was no exception, but the story is more poignant because of the intense admiration felt for her heroic resistance to Nazi aggression in 1941.

Brigadier Myers's experiences should be studied by all officers. He had received no training for the part he was called upon to play when he was selected to lead a party of 12 volunteers, who were to be parachuted into Greece to destroy the Gorgopotamos viaduct. The object of this operation was to cut the German lines of communication and so to interfere with the rapid reinforcement of their forces in North Africa following the battle of El Alamein. The drop was carried out on 30th September and the viaduct was most gallantly attacked and destroyed on 25th November. The party was then told that there was no chance of their immediate evacuation and Brigadier Myers was ordered by G.H.Q. Cairo to remain in Greece to control and direct the activities of the many bands of 'Andartes' then operating in the mountains of Thessaly. Without any prior experience of such a task, he was soon embroiled in the politics and quarrels of the various leaders of the Andarte bands, with whom he had to co-operate and whose operations he had to co-ordinate, and this aspect of his duties was to be his main concern.

At times it must have seemed well-nigh impossible to carry out the directives he received from Cairo for, as in so many occupied countries, the strongest and most active of the Resistance groups (ELAS/EAM) was Communist-inspired, and if in supporting them to achieve his ends he unwittingly jeopardized the constitutional position of the monarchy, it is hard to blame him.

During the period May-July, 1943, the British members of his Mission daringly destroyed the Asopos viaduct and by widespread and well-planned sabotage carried out by the Andartes, Brigadier Myers managed to delude the Germans into thinking that the Allies contemplated the invasion of Greece rather than of Sicily. In fact, at this time the Italians were forced to retain 13 divisions in Greece which, after the capitulation of Italy, had to be replaced by six German divisions.

The final tally of destruction wrought by the Resistance movement is impressive, but no corresponding figure of casualties suffered is given for the estimated infliction of some 25,000 on the common enemy. In the end, the civil war, which Brigadier Myers foresaw and dreaded, became a reality and the British were compelled to deploy considerable forces to retrieve a chaotic situation.

This excellent and most informative book could be improved only by the inclusion of a better map covering the areas referred to in the text.



**The Direction of War.** By Air Vice-Marshal E. J. Kingston-McCloughry, C.B., C.B.E., D.S.O., D.F.C. (Jonathan Cape.) 16s.

By virtue of his experiences as a senior staff officer concerned with inter-Service and inter-Allied planning during the last war and as a member of various inter-Service committees in India and the Ministry of Defence since the war, the author is well qualified to examine the problems of the direction of war. This book is "an attempt to elucidate and answer fundamental problems facing our political direction and high command at the present time." By framing his work against a background of his personal experiences dating from the 1914-18 War (in which he fought as a sapper and then transferred to the Royal Flying Corps) he has contrived to produce a book which is both good reading and a sound basis on which to examine the manifold problems facing us today within the sphere of defence.

His outlook is essentially broad and impartial. He does not hesitate to criticize his own Service and its outstanding leaders. Indeed, in his analysis of the personalities and characters of some of the British and Allied leaders of whom he has personal knowledge he tends to over-emphasize the occasions on which their personalities came into conflict. It is surely inherent in human nature that men who reach the top of the tree in either politics or the Services are bound to find themselves in disagreement at times, and such conflict of opinion may often only be resolved by compromise. To assume otherwise is to over-simplify the problems, especially in these days when all questions of high command and strategy involve more than one nation.

On the subject of the selection of officers for inter-Service and inter-Allied appointments he offers some interesting suggestions, and also concerning the co-ordination of our defence resources, but he stops short of the proposal favoured by many today that the Minister of Defence should shed his purely co-ordinating functions and take over a considerable measure of executive responsibility from the three Service Ministers.

The author is to be congratulated on a courageous and successful attempt to draw attention to one of the most urgent and vital problems facing this country at the present time.

**Spies and Saboteurs.** By Dr. William J. Morgan. (Gollancz.) 13s. 6d.

Most of us enjoy a good spy story. This is a spy story with a difference. It is not an account of actual espionage, but of the methods employed to select and train agents (the polite word for spies) and saboteurs in Britain during the last war. Nevertheless it lacks nothing in adventure and excitement.

In 1943 Dr. Morgan, an American psychologist, 'wangled' his way out of a chair-borne job in Washington, D.C., and found himself attached as a military testing officer (not as a psychologist) to the British Selection Assessment Board, responsible for selecting men and women for special tasks within Nazi-occupied Europe. The bulk of this book is a vivid and colourful account of the methods and tests employed at 'Pemberley,' interspersed with impressions of some of the candidates who passed through his hands. For the benefit of the romantic-minded he dispels the notion that all female spies are young and glamorous, and to prove his point relates the sad story of Biddy, the blue-eyed blonde. Whilst expressing admiration for the British methods of personnel selection, he makes some critical remarks concerning our psychologists and the part played by the psychiatrist in the selection team. We have heard them all before, but coming from a psychologist of such distinction and experience adds to their weight.

After some months at 'Pemberley' Dr. Morgan once more 'wangled' his way to his ultimate objective—an assignment in France—via commando, parachute, maquis, and intelligence operations training schools, each of which he covers in all too brief chapters.

It is a fascinating story and beneath the adventure and humour there is an undercurrent of more serious matters which will appeal especially to those interested in the selection of personnel. One hopes that Dr. Morgan will find time to produce a sequel to this book, covering his experiences with the maquis.

**Roger Fenton, Photographer of the Crimean War.** By Helmut and Alison Gernsheim. (Secker and Warburg.) 30s.

Roger Fenton, photographer of the Crimean War, and Matthew Brady, whose camera made a pictorial record of the War of Secession, were the pioneers of an activity which was destined to attain really remarkable proportions. The volume under review is devoted to a careful selection of the former's Crimean pictures, together with his letters from the seat of war; and a thoughtful essay on his life and work by the compilers.

The study of Fenton and his activities with camera and travelling darkroom is informative and interesting, as fair to the master craftsman's lesser rivals as it is judicious in assaying the quality of the work for which he himself was responsible. Fenton's own letters are lively and discursive, briskly written and bountiful in the sort of detail on which the artist's eye would fasten. If they add little to what has already been recorded, they have their own individuality and value. Some of his comments are particularly enlightening, as that under the heading of Friday, 9th March (1855): "Lord Raglan was in town this morning with his staff. The soldiers have nothing but good words to say about him; one of them told me that when the weather was at the worst he [Raglan] was constantly sitting about amongst the men." This is in radical contrast to the malicious but long-lived legend of an aloof and frigid Commander-in-Chief, to whom the sufferings of the troops were no more than an academic matter of parade states and 'effectives.'

But it is the photographs themselves that will attract principal attention. Fenton did not arrive in the Crimea until the early Spring of 1855, after the worst of the dreadful Winter of '54-'55 had passed, and when the devastation wrought by the 'Great Storm' of 14th November, 1854, had very largely been tidied up. And there is, unquestionably, rather a 'tidied up' look about much of Fenton's work with the camera. Static *tableaux vivants*, they cry aloud for such obvious Victorian titles as *L'Entente Cordiale*, *His Day's Work Over*, and the like. These set-pieces alternate with stiff portrait studies, of which Raglan's calm, ascetic features and Bosquet's look of a successful butcher have most faithfully been captured. The photographs of Balaclava harbour certainly help to bring home the pitiful inadequacy of this haven as a base port, while there is a quality of the unobtrusively dramatic about *The Valley of the Shadow of Death* and the tombs on Cathcart's Hill, despite harsh lighting and obtrusive detail.

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Gonzalo Fernandez, the second of two sons of Don Pedro de Cordoba, was born in 1453, and in early youth was made a page at the Court of Isabella of Castile. To this shrewd and forceful ruler he remained devoted throughout his whole life. Grown to splendid, virile manhood, Gonzalo's successful conduct of the campaign against the Moors of Granada exhibited so astonishing a grasp of both political and military warfare as to establish him as one of the leading commanders of his day.

In a military sense, the latter half of the XVth Century was an age both of material and spiritual transition. The days of 'chivalry,' when the aim of the fighting man had been, as Lecky put it, "to unite the force and fire of the ancient warrior with something of the tenderness and humility of the Christian saint," had given place to an era of grim professionalism. Gunpowder had robbed the art of war of its romance; the problems of supply—the quartermaster side of campaigning—were as much a preoccupation as its strategic conception and tactical development.

Of all this Gonzalo, 'the First of the Cavaliers,' seems to have had an instinctive grasp. Under his leadership the reclamation of fertile Granada was only the preliminary step on the road to Spanish predominance in Europe. It was a progress that took a Philip on the throne and a defeated Armada strewn about the coasts of Britain finally to arrest.

Keenly aware of the changes rendered ineluctable by the new professionalism, Gonzalo did away with the temporary command of heterogeneous and disparately-sized companies of feudal levies. Standing *battalia* of fixed strength were commanded by colonels who were held responsible for their training as well as for their leadership in battle. He also formed separate bodies of light and heavy cavalry, while adopting many of the guileful stratagems and ruses he had learned from the Moors. In his concern for the health and well-being of his troops, their reward after good service, and their support when incapacitated, he was undoubtedly ahead of his time; and although a stern disciplinarian, he rejoiced in the opportunity to give rein to a truly regal generosity.

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Smith's successful defence of Acre are told at some length. After the repatriation of what was left of the French Army, the British forces were withdrawn, leaving the Egyptians to their own devices.

The rise to power of Mohammed Ali was soon marked by his ruthless extermination of the Mamelukes and he became the undisputed master of Egypt, though he still owed allegiance to the Sultan of Turkey. Next come Waghorn's 'Overland Route' and the construction of the Suez Canal, which takes us up to the time of Ismail Pasha, who became Khedive of Egypt; but his many extravagances led to his supersession in 1879 by his son, Tewfik Pasha. Two years later Arabi Pasha, a Colonel in the Egyptian Army, broke out into open rebellion. This lasted for 12 months, and Arabi's suppression by Sir Garnet Wolseley, following the sea bombardment of the forts at Alexandria, ushered in a phase during which, although Tewfik continued as Khedive, the real 'power behind the throne' was in the capable hands of Lord Cromer, who returned to Egypt as British Agent and Consul-General.

The rest is within the memory of many who are still alive today. The Sudan Campaign of 1884-85; the fatal procrastination of Gladstone and the Liberal Government of the day, which resulted in the failure to relieve Gordon at Khartoum; the reconquest of the Sudan in 1898, which gave peace to that vast area; the Fashoda incident; and the work of Cromer, Kitchener, and others in restoring prosperity to Egypt and the Sudan, are all reasonably well known.

Then, after the 1914-18 War, the Egyptian Nationalists began to cause trouble. But the cause and effect of the political ramifications during these later years, which Mr. Wood Jarvis sets out in all clearness, must be read in full to be properly understood. Ultimately, in 1952, King Farouk was compelled to abdicate by a revolutionary group of Army officers who are still in control of the country. The future of Egypt is now—what?

There are a few minor errors in naval and military details. For instance, in 1799 Sir Sidney Smith, who was then still a post-captain, was not in command of the English Mediterranean Squadron (*sic*); and on pages 165 and 167, 'Dragoons' and '4th Dragoons' should read 'Dragoon Guards' and '4th Dragoon Guards' respectively.

A good index is provided, but a chronological table of the chief events during these many centuries might well have been added. The complete absence of any maps to indicate the political boundaries down the ages as well as the location of places is the principal blemish in an otherwise excellent book, which can be strongly recommended to readers of all ages. Someone once coined the phrase, 'history without tears.' Here we have it.

#### NAVAL

**Escort.** By Commander D. A. Rayner, D.S.C., V.R.D., R.N.V.R. (William Kimber.) 16s.

Even the most casual glance through this book shows that it possesses virtues not always found in similar publications. Amongst these are an exceptionally good index and a number of maps; both are of great assistance to the reader.

The book is the work of Commander D. A. Rayner, R.N.V.R., edited by Captain Stephen Roskill, R.N., author of the *Official History of the War at Sea, 1939-45*. It tells the story of the unique career of Commander Rayner in the 1939-45 War. There were escort commanders who sank more U-boats and brought in more convoys than Rayner, but no other officer, let alone one of the R.N.V.R., served continuously over five years in command of anti-submarine craft or graduated from trawler to corvette, then to several destroyers, and finally commanded a group of new and greatly improved escort vessels.

At school, Rayner's burning ambition was to join the Navy and he suffered a severe setback when rejected on the score of flat feet. He determined to join the R.N.V.R., flat feet or not. After several abortive attempts he finally succeeded in July, 1925. By 1939, he had reached the rank of lieutenant-commander and shortly after the outbreak

of war joined the 900-ton anti-submarine trawler *Loch Tulle*, first as unit commander and then as Senior Officer 14th Anti-Submarine Group. On her way from Portland to Rosyth the *Loch Tulle* attacked a suspected submarine contact south of Scarborough, and then spent the Winter of 1939 patrolling off Scapa. About this time Rayner was awarded the D.S.C. By the end of the German invasion of Norway, auxiliary patrols had made the ports safe and emphasis had slowly shifted to escort work; "for where," writes Rayner, "would we be more likely to find a U-boat than round a convoy? The convoy was at once our charge and our bait." History shows how right he is! In December, 1940, Rayner was appointed to command the *Verbena*, the first corvette entirely officered by the R.N.V.R.

During the next two years he escorted convoys as far afield as Iceland, Gibraltar, Sierra Leone, Cape Town, and Colombo. Finally the *Verbena* put into Bombay with defects and in September, 1942, Rayner returned home in a troopship. In March, 1943, he was given the *Shikari* as Senior Officer 21st Escort Group and became the first R.N.V.R. officer ever to command a destroyer. During the next 18 months he commanded successively the destroyers *Shikari*, *Warwick*, of which he was a survivor, and *Highlander*, but by September, 1944, the U-boats were coming inshore and Rayner was appointed to the *Pevensey Castle* as Senior Officer 30th Support Group of Castle-class corvettes, "the finest anti-submarine vessels in the Navy." In her he took part in the destruction of *U.1200*.

Lack of space prevents anything more than the briefest survey of Commander Rayner's book. It is enough to say that it is a book that can be strongly recommended.

**U.S. Marine Operations in Korea, 1950-1953.** Vol. I, The Pusan Perimeter. By Lynn Montross and Captain Nicholas A. Canzona, U.S.M.C. (Headquarters, U.S. Marine Corps.)

This volume, the first of a planned series, gives a detailed and well-documented account of the operations in which the 1st Provisional Marine Brigade and the 1st Marine Air Wing participated as an air/ground force during the fighting in the Pusan perimeter, from 2nd August to 13th September, 1950, after which they were withdrawn for amphibious operations at Inchon. The U.S. Marines are trained primarily for amphibious warfare, though pure infantry training is not neglected. It was in the latter capacity that their services were required to begin with in Korea.

The story, as told here, is written chiefly for the U.S. Marines and provides a wealth of intimate detail of what individual members of that famous corps accomplished in difficult circumstances. The degree of participation by other units, either American, South Korean (ROK), or those of other United Nations contingents or ships, is designedly referred to only in so far as to present the overall picture. In this connection the reader is recommended to consult the excellent 'Diary of the War in Korea,' published in the R.U.S.I. JOURNAL and beginning in the issue of August, 1950.

Starting with the historical background of Korea and enumerating the chief political events subsequent to VJ-day, the authors go on to describe the composition of the North Korean Peoples Army (N.K.P.A.). This is followed by similar data of the Marine Brigade and of the available U.S. ground forces in the Far East in 1950. The rest of the book is devoted to the six weeks of fighting in the south-east corner of Korea, and ends with a brief summary of this part of the campaign as a whole and how the Marines fitted into it.

Although most of the officers and non-commissioned officers were veterans of the 1939-45 War, comparatively few of the junior other ranks had had similar experience; it will be seen, however, that they soon became battle-hardened and worthily upheld the traditions of their corps.

In view of the controversies elsewhere over the respective merits of aircraft carriers and airfields, it will be noted (pp. 242-4) that the consensus of opinion in Korea was in favour of the carrier-borne aircraft for providing immediate close support to ground

troops in action. The shore-based aircraft from Japan had only 15 minutes' available flying time over the fighting area before fuel shortage compelled their return to base. The value of helicopters in the Pusan perimeter was fully demonstrated. It must be observed, however, that enemy air opposition was practically non-existent during this period.

The book is well printed and has a number of interesting photographs; a complete command and staff list of the 1st Provisional Marine Brigade is furnished, together with a glossary of abbreviations, without which latter the lay reader would be lost. There is a good index, but the maps and action diagrams leave something to be desired. Except for those in the endpapers, they are all of one colour and it is not always easy to follow the movements of individual sub-units. There is seldom any legend by which to identify the various units, and some of the symbols coupled with the labels are unrecognizable. Apart from the more prominent hill-tops, there are no figured contours (which are best shown coloured) and the hachures by themselves do not give a very clear idea of the terrain as a whole. Of necessity, an action diagram cannot always be immediately opposite the relevant pages in the text; this, however, could have been remedied by 'pull-out' diagrams. A further aid to reference would have been to number these diagrams and to note the numbers against the sub-headings in the text.

This book can be thoroughly recommended, not only to American readers but also to all those who wish to follow the operations of the armed forces of the United Nations in this campaign.

### ARMY

**Nine Lives.** By Richard Hilton. (Hollis and Carter.) 16s.

These are the outspoken and very entertaining reminiscences of an 'unorthodox soldier' but, nevertheless, a good gunner who describes himself as reasonably keen with a hatred of futile jobs. The nine lives refer to the chief phases of his career. He chose the Royal Garrison Artillery in order to be able to live on his pay; and with the hope of being able to escape from coast defence as early as possible and serve with a mountain battery on the North-West Frontier.

However, in the 1914-18 War he was in France with a battery of 9.2-inch howitzers and, after considerable experience as an F.O.O., managed to transfer to the old Royal Flying Corps. His stories of flying in those early days are well worth recalling. At this time his main interest was in securing properly organized air observation for the guns, and he remained always of opinion that the air co-operation squadrons should be the Army's own.

His views on Passchendaele—so often discussed and sometimes condemned as a series of battles which should never have been fought—are worth remark. Speaking as a gunner he holds that these operations broke the power of the German artillery, an essential prelude to the victory which came in the following year.

A gunner again from 1919, he found the years between the wars a gloomy period for the professional soldier. After serving with tanks and as an armoured car instructor he at last realized his ambition and was able to join an Indian mountain battery. Before doing so he was nearly lost to the Army altogether. Few Regular officers of junior rank have sent in their papers and then, on change of mind, have been allowed to continue on the active list.

His Frontier experiences are none the less interesting because he saw no fighting there. Likewise his stories of going after tiger are worth telling although no tiger was shot. An enthusiastic follower of the Peshawar Vale Hunt, 'station polo' made no appeal to him and he did not rate himself a good shot. He preferred to spend his leaves in wandering off the beaten track in India and into Tibet. With something of a gift for languages, and a keen interest in people rather than in governments and policies, he was quick to make friends with the local inhabitants and thereby accumulate a lot of interesting information. Later his travels extended to some of the less civilized parts of Europe.



Still a gunner at the outbreak of the 1939-45 War, he commanded a heavy regiment in the Dunkirk campaign. In 1944 he landed in Normandy as C.R.A. of a division, but his fighting career ended towards the close of June when he was severely wounded at Tourville. He recovered in time to play a useful part in the liberation of Norway, an interesting and little-known phase of the clearing up which followed the German surrender.

In the concluding pages will be found some very good advice to officers who have retired or are about to do so. The author appears to have ordered his own affairs extremely well.

**Surgeon at War.** By Lieut.-Colonel J. C. Watts. (Allen and Unwin.) 12s. 6d.

Colonel Watts has seen modern war from almost every angle and in almost every theatre from Normandy to Korea. There is much in his book to interest the specialist and also the general reader who would know the extent to which the human frame can recover from injury, given skilled treatment informed by modern knowledge. The author has a pleasant sense of humour which has helped him to produce a well-balanced book; the facility with which he can turn from the sombre to the gay makes it all most readable. His division of nursing officers into four categories will bring back memories to many. His stories are all good; the final one of the American doctor's documentation of the tattooed Ulster Rifleman is a gem.

His fairness is notable: where he finds the Germans or the Japanese did something creditable he says so, as exemplified by the accounts of the heroism of the German nurses when their hospital train broke down, and of the attack by the disarmed Japanese on the Indonesian rebels.

This book underlines how medical knowledge has transformed the incidence of war casualties. In the 1914-18 War, deaths from wounds exceeded those from disease for the first time in any war. In the 1939-45 War, many wound deaths were avoided by superior surgical treatment, the improved treatment of burns was another major factor in the saving of life. In Korea the death rate was lower still.

In this connection one must also remember the improvements in the transport of casualties. It is a far cry from the spring carts of the Royal Waggon Train, which evacuated Wellington's wounded, to the helicopters which do the same job in Malaya and Korea. But, as the writer warns us, the use of helicopters is dependent on local air superiority and the ground transport provided by the R.A.S.C. columns is still essential. It is a curious fact that owing to the extremely efficient evacuation services in Normandy (many cases arrived on the operating table within half an hour of being wounded) operative mortality figures were adversely affected.

The most exciting part of the tale deals with the author's experiences with the Sixth Airborne Division both in Normandy and at the Rhine crossing. He arrived by glider on each of these battlefields.

Finally, a word on the atmosphere of common sense which permeates the whole book. What Colonel Watts has to say on such varied matters as accidents due to carelessness with arms, the unfaithfulness of wives in war-time, and the treatment of frostbite in Korea is all well worth noting and remembering. He quotes and endorses the saying of his anaesthetist, "Anyone can cut. A surgeon is a man who knows when not to." This surgeon not only knows when not to cut but also how to write a book.

**Rossano.** By Gordon Lett. (Hodder and Stoughton.) 12s. 6d.

This book should appeal to many classes of reader besides soldiers. It is a true tale, modestly told, of a British officer's life behind the enemy lines after escaping from a prisoner-of-war camp. But it is more than an ordinary escape story, because he became the leader of an 'international battalion' of partisans, and practically the temporary

ruler of a mountainous district in Italy. Many British motorists must have passed through a corner of his theatre of operations along the Via Aurelia between La Spezia and Rapallo.

The story covers that curious period between the first surrender of Italy and the final liberation of the northern part of the country by the Allied advance. There existed during this period what the author calls the 'Little Republic,' a puppet Italian government exercising a tenuous authority in the north with the help, or perhaps the pressure, of the German jackboot.

The author gives a clear picture of conditions in remote valleys, where popular sentiment ran strongly against the Axis and the Blackshirt Militia rarely ventured to penetrate. He shows also the wastage of partisan effort caused by squabbling between politically minded groups, Communist and otherwise, who regarded the partisan war as a preliminary to post-war elections rather than a serious contribution to winning the war.

It is far more than just a war book. It is a thriller—but different to many thrillers in that the characters portrayed are real and vivid. This is due not only to its being a true story but to the author's literary skill in character description. All these things make *Rossano* a book for a wide general public. But for soldiers there is a deeper interest still. It is almost a text-book of modern guerrilla war.

In it can be studied both sides of this form of fighting—its great possibilities and its serious practical difficulties. The advent of nuclear weapons may render full-scale 'limitless' war so obviously suicidal as not to be worth waging. But, while human nature remains what it is, aggressors will continue to seek means of gaining their aims by violence without blowing the globe to pieces. Such a means may exist in 'undeclared' war, fought by small forces supplied by air, living deep in the enemy country, and supported perhaps by dissidents among the local population.

The best antidote to guerrillas is drastic reprisal upon the local population, and Major Lett shows clearly how seriously this can complicate the partisans' activities. But such an antidote presupposes the ruthlessness of an authoritarian government. For benign régimes such as ours, guerrilla warfare under modern conditions could become a problem, to which at present it is hard to see a complete answer.

Perhaps the grimmest part of the whole book is the second half of the epilogue. It should be read by all true friends of Italy.

**Combat Support in Korea.** By Captain John G. Westover (Combat Forces Press.) \$5.00.

This book, prepared under the auspices of the Office of the Chief of Military History of the War Department, is written primarily for the education of the junior officers of the American Army. It consists of a collection of interviews with members of all the arms and services of the U.S. Army with the exception of those serving in the Infantry, Artillery, or armoured units.

Each episode described has been carefully selected to teach some lesson, and in this respect bears some comparison with those to be found in the series of *Notes from the Theatres of War*, produced by the War Office during the 1939-45 War. It is divided into nine parts, of which the first seven are the most important. In these, the views of the officers and men serving in the Corps of Engineers, and in the Transportation, Chemical, Signal, Medical, Ordnance, and Quartermaster Corps are recorded on a variety of subjects and situations that confronted them under active service conditions in Korea.

These range from the care and maintenance of equipment to the self-preservation of an unarmed, non-combatant unit in an ambush. The principal lessons show clearly the value of improvisation, initiative, and leadership in an emergency and the results to be expected from any lack of discipline or morale, the failure to maintain adequate protection

at all times, or faulty training. These may not be new, but the interest in this book lies in their application to such services as can normally expect to relax to some extent behind the lines.

The point is frequently stressed that in a modern war against a Communist state, in which guerrillas, a 'fifth column,' or a Resistance movement is normally operative, no administrative unit is ever 'safe.' No such unit can be classified as non-combatant; all form part of one team and each must know how that team functions.

Part VIII deals with episodes which it is hard to classify, and Part IX with 64 'short bits.' The latter is, perhaps, the most unsatisfactory portion of the book, since many of the subjects are simply introduced and not discussed.

To all who may not have served in Korea, this collection of views on modern equipments and operations will be of great value. Here they will find information relating to bridge building, the use and abuse of truck companies, the effect of flame-throwers, the handling of the napalm bomb, and the limitations of V.H.F. and relay stations. Optical and dental treatment in the field, rations, clothing, and the burial of the dead are all dealt with, but all through there runs the ever-increasing demand for greater use of the light aircraft or helicopter for a variety of needs, from the evacuation of casualties to the laying of cable. If only for the reason that it emphasizes the importance of training and 'awareness' that go to make a good unit better, this book is well worth reading.

**The Guards Armoured Division.** By Major-General G. L. Verney, D.S.O., M.V.O. (Hutchinson.) 15s.

The object of this work is to record both the part played by units in the general actions of the Division and the part the formation as a whole took in the campaign of North-West Europe, 1944-45. The author, who served in the Division, makes the point that Guards battalions not included in this formation fought in France and Norway, 1940, in all the campaigns of North Africa, and in Italy.

A brief chapter is devoted to the formation, organization, and training of the Division, its first commander being Major-General Sir Oliver Leese. He was succeeded by Major-General A. H. S. Adair, who commanded throughout the campaign. The author makes a graceful reference to General Sir Bernard Paget, Commander-in-Chief Home Forces, and to his successor, General Sir Harold Franklyn, to whom "is due a humble but heartfelt tribute of gratitude from those who were launched into battle so well fitted to endure, and to overcome, their formidable enemy."

After concentration in Normandy, completed by the end of June, the Division took part in Operations "Goodwood" and "Bluecoat," suffering considerable casualties. The pursuit to Brussels and beyond was almost unopposed in spite of the attention it attracted. There followed heavy fighting in the attempt to reach Arnhem in September, the Winter actions, the Rhineland battle, and the final advance through northern Germany. The latter was "hard, gruelling, and unspectacular." The formation ceased to be an armoured division on 9th June, 1945, after adding new laurels to the long records of the Household Brigade.

The volume is very well arranged and the narrative, though necessarily compressed, does fulfil the object of the book. It is clear and objective, and includes sufficient reference to intentions, major events, and topographical detail to form an adequate background to the activities of the Division and its units. The author makes a few brief and interesting comments. There are two maps and ten good sketch-maps in the text. It also includes an index and several appendices which contain, among other information, the divisional order of battle and lists of senior staff officers and commanders of units. Works of this nature produced by 'private enterprise' are of particular value today, since official histories differ so much from those of the 1914-18 War.

**The Eleventh at War.** Being the story of the XIth Hussars (Prince Albert's Own) through the years 1934-1945. By Brigadier Dudley Clarke, C.B., C.B.E. (Michael Joseph.) 42s.

In theme, treatment, and format this is regimental history *de luxe*, and takes a very high place among its kind.

The story begins with the departure for Egypt in 1934, the Regiment being already equipped with the armoured cars which, in this age of the machine, enabled light cavalry still to carry out their ancient rôle. As the result of peaceful days on the western frontier of Egypt, the XIth became desert-wise before the clash of arms and an interlude in Palestine, where Arabs were the enemy, was war of a kind and no bad preparation for the ordeal which lay ahead. When, in June, 1940, the XIth fired the first shots at the Italians in the Western Desert they were launched into five years of fighting which included, after many vicissitudes, the surrender of the Axis forces in North Africa, the advance of the Allies in southern Italy and, finally, the campaign of North-West Europe which ended in the total defeat of Germany. The Regiment can claim to have been first into Tunis and the first British troops to enter Berlin, distinctions which no one will grudge them.

The XIth, be it noted, were taken away from the Western Desert at a critical time in 1942 and sent to Persia; the plight of the Russians, "these uncompromising allies," making it advisable that we should have a highly mobile reconnaissance unit of our own to watch the passes of the Caucasus.

Brigadier Dudley Clarke is adept at portraying, in and out of action, the outstanding personalities of the Regiment, from trooper to commanding officer. Also, the narrative shows very clearly how an armoured car regiment carried out its duties in the field and fought when the need arose. Often these encounters concerned no more than a troop or squadron, lending themselves to detailed and vivid description. And how adaptable the Regiment had to be when switched from one theatre of war to another! The difficult country of southern Italy cramped the style of troops who were fresh from the desert; the *bocage* of Normandy proved the greatest handicap of all to free movement.

The roll of honour reveals that the XIth suffered casualties greater than their strength when they first went out to war, and the list of honours and awards is of imposing length. The illustrations are admirable, and mention must be made of the striking frontispiece, a reproduction in colour of the Simon Elwes portrait, in full dress uniform, of King George VI, late Colonel-in-Chief of the Regiment. It is a pity that the place-names on many of the maps are not easy to decipher.

**A History of The Royal Sussex Regiment, 1701-1953.** By G. D. Martineau. (Moore & Tillyer, Ltd., Chichester.)

The 35th Foot was originally raised in Belfast by order of King William III. However, before the close of the XVIIIth Century they had close connections with Sussex and acquired the County name in 1804. In 1832, King William IV granted the title 'Royal' and the facings were changed from orange to blue. During the Cardwell reforms the Regiment was linked with the 107th (Bengal) Regiment, formed in 1853 as the 3rd Bengal Europeans of the East India Company's service. In 1881, the 35th became the 1st Battalion and the 107th the 2nd Battalion, The Royal Sussex Regiment.

The first battle honour won by the 35th was "Gibraltar, 1704," since when they have fought in four continents, always with a high reputation for steadiness, fortitude, efficiency, and *esprit de corps*. The 2nd Battalion soon followed suit, and the Regiment maintained the closest connection with the County which never failed to provide recruits of sterling quality.

In the 1914-18 War the 1st Battalion was one of the handful of units left in India to hold the North-West Frontier; the 2nd Battalion served in France and Flanders with the 1st Division. From 1940 until 1945, the 1st Battalion, as one of the three British battalions of the famous 4th Indian Division, fought all through North Africa, Italy,



and in Greece with great distinction. The 2nd Battalion, after serving in France during 1940, played an effective part at Alam Halfa and El Alamein before moving to Iraq and Persia. The Territorial and 'Kitchener' Battalions lived up to the traditions of the Royal Sussex in France, Gallipoli, and Palestine during the 1914-18 War, in France, Libya, and Burma between 1939 and 1945.

The Regiment has a remarkably fine record of gallant service to which the author has done full justice in the space at his disposal. The marked characteristics and regimental pride of the Royal Sussex are clearly shown in the narrative. Some well-chosen anecdotes of events and references to the many notable officers who served in the Regiment are also included. This volume should kindle a sense of pride in the past generations of the Regiment and in all Sussex people. To present and future members of the Regiment it will be a source of inspiration. Furthermore, it can be read with great pleasure by officers of similar English county units.

**History of the 4th Battalion, King's Shropshire Light Infantry (T.A.), 1745-1945.**

By Lieut.-Commander P. K. Kemp, R.N., F.R.Hist.S. (Wilding & Son, Shrewsbury.) 20s.

At first sight one might remark that this modest volume is hardly commensurate with the importance of the occasion; but it forms an admirable manifestation of the County Territorial spirit and, being locally produced without any frills, is probably within the means of the many Shropshire 'lads' who would like to possess it.

The Battalion has its roots in a certain local corps raised at the time of the "'45," and Commander Kemp has covered the intervening years with an able summary of events, expanding his narrative when he comes to the main business of war.

Unlike most fighting units, the 4th K.S.L.I. went much farther afield during the First World War than in the Second. Between 1914 and 1917 the Battalion, or detachments of the Battalion, served in Rangoon, the Andaman Islands, Singapore, Hong Kong, and Australia, and paid visits to Ceylon and South Africa on the way home. Then came France: Passchendaele, Welch Ridge, the German offensive of March, 1918, the Marne. Here, in the Battle of Bligny, was won the French decoration of the Croix de Guerre with palm, a very unusual but well-deserved honour for a battalion. The concluding scene is of the advance to victory, for the 4th K.S.L.I. were 'in at the death.'

The tale of the 1939-45 War is one of training in England, Wales, and Northern Ireland for 'the day,' and then of the campaign in North-West Europe. As a unit of the infantry brigade in the 11th Armoured Division the Battalion saw plenty of fighting in Normandy, shared in the pursuit across France and Belgium to Antwerp, was heavily engaged in the advance to the Rhine, and fought in Germany until the Elbe was reached.

If 1914-18 is given only a modest share of the volume the reason may be that there are many more survivors of 1939-45 and that their memories are comparatively fresh. The text ends with these words "... the sons of those men of 1918 were fully worthy of the deeds and sacrifices of their fathers," and one can hardly say more, or less, than that.

There are sketch maps of the areas in which the 4th K.S.L.I. fought their principal engagements, a roll of honour serving both wars, and the honours and awards, including one Victoria Cross, won during the 1939-45 War. It is a pity that those for 1914-18 are omitted. They could have been sifted from the general regimental list.

**The Maroon Square.** Compiled by Majors A. D. Parsons, D. I. M. Robbins, and D. C. Gibson. (Franey and Co., Ltd.) 16s.

This is a history of the 4th Battalion, The Wiltshire Regiment (Duke of Edinburgh's), in North-West Europe from 23rd June, 1944, to the end of the war. It also covers preliminary training in England from 1939 onward, and the Battalion's part in the occupation of Germany. It is an extremely well compiled narrative. Assisted by adequate maps, it is easy to follow the sequence of operations, and to understand how

even the smallest section or platoon incident fitted, not only into the Battalion picture, but into the whole 21st Army Group story. An ingenious and liberal use of sub-headings breaks the pages and facilitates quick reading. The addition of an index would have improved matters even more.

The compilers have successfully solved what is always a difficult problem in unit histories, of how to include the many little intimate details, enjoyed by those who served with the Battalion, without overdoing it. The result is a book which will interest anybody who likes to read a plain tale of good, hard infantry fighting.

The lighter side of war has not been forgotten either—and again without overdoing it. All of us, for example, who took part in the fortifying of our coasts after Dunkirk, will appreciate this remark. "In those days higher commanders took the most intense personal interest in every detail, and no weapon pit, sited by any officer lower in rank than brigadier, had any hope of survival."

For gunners the book makes particularly pleasant reading owing to the generous praise repeatedly given to the Battalion's supporting artillery. Good, close support is sometimes rather taken for granted in the battle histories of supported arms.

A remarkable feature in minor tactics, brought out many times in the narrative, is the nonchalant manner in which platoons or companies coped with enemy tanks right among them—a situation which used in pre-war theory to be deemed almost untenable. It shows what good Infantry can do. Shelling or mortaring seemed a far more unpleasant ordeal, but these too were taken as part of the day's work.

In spite of some peace-time theorists, Infantry still remains the backbone of warfare on land. It is encouraging to think that this Battalion was no specially hand-picked unit but a Territorial battalion of one of our county regiments.

**Lion with Blue Wings.** The Story of the Glider Pilot Regiment, 1942-1945. By Ronald Seth. (Gollancz.) 16s.

The object of this book is to tell the story of an unusual Regiment in which all ranks had to be both soldiers and airmen. According to the publisher's blurb it is intended for the general reader. This is soon apparent; the first chapter resembles the opening of a 'tough' thriller. Moreover, the narrative is not arranged in chronological order as is usual, and desirable, in regimental histories.

As Field-Marshal Lord Alanbrooke remarks in his foreword to the volume, the Regiment lived up to its motto: "Nothing is impossible," and "set up an example of courage, endurance, and service to its country." Air Chief Marshal Sir Leslie Hollinghurst, whose invaluable co-operation facilitated the training and efficiency of the unit, also contributes a foreword in which he refers to the Regiment's "progress through trial, frustration, and error, often tragic, to the ultimate achievements of Normandy, Arnhem, and the Rhine."

The Regiment's first operation, part of the assault on Sicily, was nothing less than a disaster. Of the 140 gliders towed from North Africa only two reached their objective; 47 landed in the sea and the remainder came down all over the island. However, as the author points out, the experience gained was valuable as a basis for improvements in training, technique, and organization. In spite of setbacks there followed a period of steady progress and the Regiment was ready to play a big part in the successful landing of 6th Airborne Division about Caen in June, 1944. Two chapters are devoted to the unlucky Arnhem operation in which every available pilot of the unit was committed to action. Their casualties were serious, namely, 147 all ranks killed and 469 taken prisoner. In their final operation, the Rhine crossing, a different technique was employed and 90 per cent. of the troop-carrying gliders landed as planned: a very great improvement on the Sicily landing, though losses among pilots were again heavy.

This is a fine record of human courage and endeavour. The narrative, however, is unfortunately marred in places, at least for Service readers, by 'journallese.' The volume is illustrated and provided with an index. There are no maps.

**Boot and Saddle.** By P. J. Young. (Maskew Miller Ltd., Cape Town.) 12s. 6d.

This is the story of the permanent corps maintained in Cape Colony for over a century to serve as police in peace and to defend the Colony in war. The earliest were two Imperial units, namely, The Cape Regiment and The Cape Mounted Riflemen. They were replaced by a Colonial unit, The Frontier Armed Mounted Police, later renamed Cape Mounted Riflemen, until after the Act of Union when the title was again altered to 1st Regiment, South African Mounted Riflemen. These last three units were to all intents and purposes the same corps with different titles and should not be confused with the Cape Mounted Police. The author, who served in the C.M.R. from 1903 until after the 1914-18 War, pays tribute to the men of his own time and to those of an earlier day in recording the services of these units, none of which should be forgotten.

When the Cape was re-occupied in 1806, the men of a Dutch unit, The Hottentot Light Infantry, were invited to re-engage for the British service. Most of them did and were formed into The Cape Regiment. The unit soon earned a good name for work on the frontier and survived until 1820, being replaced by the C.M.R. This was a Regular cavalry regiment formed from officers and other ranks seconded from the Line with a proportion of Hottentots. The uniform was rifle green. In 1870 the unit was brought home and disbanded in one of our periodic fits of economy. Their duties were taken over by the F.A.M.P., a local corps formed in 1855 by the amalgamation of rural police units. In 1878, however, the Cape Parliament decided to reorganize the F.A.M.P. into a Regular mounted regiment, with the old title 'C.M.R.,' to be recruited mainly in England. In 1913, the C.M.R. was renamed 1st Regiment, S.A.M.R., and finally disbanded in 1920.

The narrative gives a clear account of life in these units, of the part they played in many small wars, and of the difficulties and hardships overcome in peace and war. It also includes information on organization, administration, armament, and dress. The author rightly gives, as an historical background, an outline of the development of the old Cape Colony during which all these units were prominent as police and soldiers. His own experiences and reminiscences add some good local colour.

It is a well-produced volume, provided with a sketch-map of the eastern frontier of Cape Colony, an index, and some good illustrations of groups and individuals. The ten appendices include records of war service and events, some potted biographies, and other details about personnel. This book is a valuable history of these fine units and one which should prove of great interest not only in South Africa, but also in this Country.

#### AIR

**Great Airmen.** By Norman Macmillan, M.C., A.F.C. (Bell.) 12s. 6d.

Wing Commander Macmillan, himself an experienced pilot and a well-known air historian, must have had considerable difficulty in selecting for his book the 20 most notable figures in aviation during the past 50 years—from the time of the first flight of the Wrights in 1903 at 30 miles an hour to that of another American, Yeager, who in 1953 attained a speed of 1,650 m.p.h. He has, however, made an excellent choice. Not only does he include pilots, both Service and civilian, such as Ball, Cheshire, Duke, Doolittle, Blériot, and Richthofen, but he also writes the equally important stories of organizers and designers like Trenchard, Whittle, de Havilland, and de la Cierva. These interesting studies emphasize the immense progress in the air during those few years and bring out the exceptional qualities of the men who made this possible.

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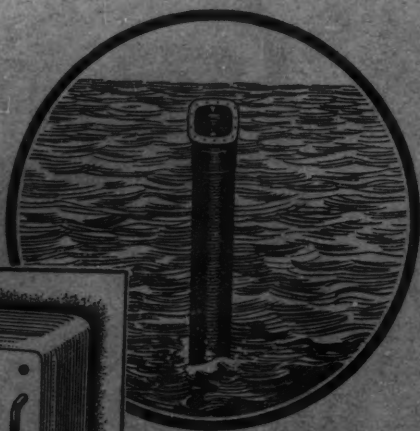
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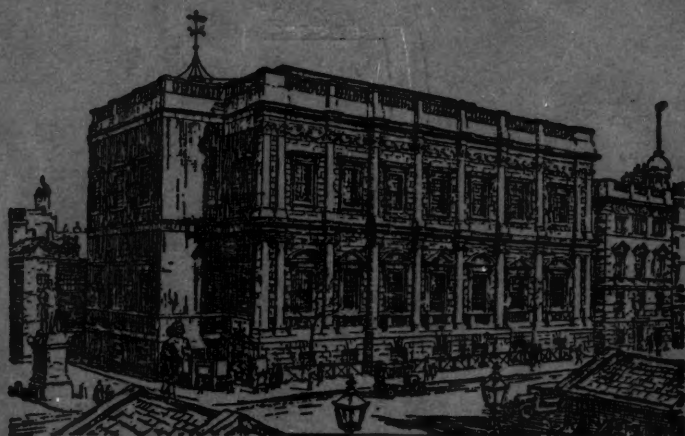


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